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ABSTRACT

This report contains recommendations for providing for the health needs of all school-age children in Missouri through health services in the public schools that are designed to detect problems, reduce absenteeism, and reduce the failure or dropout rate. An implementation plan described in opening sections includes five components: (1) capacity-building programs--planning programs to prepare schools for implementing health service programs; (2) generalized school children's health services programs--the basic level of services to be provided to school-age children; (3) intermediate school children's health services programs--a program incorporating both generalized and expanded services; (4) primary health care service programs--comprehensive primary care services in the school setting; and (5) the management training initiative--technical assistance to schools and school districts that utilize any of the programs. Sections of the report include descriptions of the planning approach and the program design; discussion of the intended impact; and recommended strategies. Also included are a list of members of the School Children's Health Services Committee, a glossary, and end notes. Appendixes, which comprise more than half the document, contain sections of relevant state legislation, spreadsheets of data, and maps and charts displaying distribution of key health status indicators in Missouri counties. Contains 30 references. (JB)

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Opening Doors to Improved Health

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ED 380 428

for Missouri's School-Age Children

Recommendations of the
Missouri School Children's Health Services Committee

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Opening Doors to Improved Health

for Missouri's School-Age Children

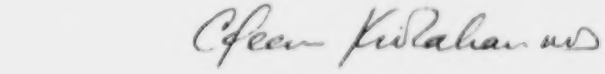
Recommendations of the
Missouri School Children's Health Services Committee

Acknowledgements

The opportunity to plan a health service program to meet the needs of all school-age children in Missouri has been both challenging and rewarding. In developing this program, the Department of Health appreciates the cooperation and collaboration of the Departments of Social Services, Elementary and Secondary Education, and Mental Health.

The staff of the Division of Maternal, Child and Family Health (MCFH) in the Department of Health assumed the primary responsibility for coordinating the planning efforts for this program. Assistance was received from the Region VII office of the federal Department of Health and Human Services. Through Region VII, Ms. Judith Igoe, a nationally known and respected school health consultant, was engaged to provide technical assistance to the MCFH staff. Ms. Igoe is an Assistant Professor and consultant in the Office of School Health, the University of Colorado Health Sciences Center, Denver, Colorado. She has extensive experience in assisting states with the development of school health services programs. Ms. Igoe's contribution was invaluable to the School Children's Health Services Committee as they endeavored to produce programs that will best suit the needs of Missouri's children.

The Department of Health thanks the many individuals and groups who supplied the data, expertise, energy and labor necessary to complete this project. It is our hope that, working with community health providers, we can improve the health of Missouri's children.



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I. Introduction

In the last several decades, American families have undergone dramatic changes in structure and function. As the individuals and groups within our society change, the institutions of our society must also evolve. With visionary insight, the 1993 Missouri General Assembly, in cooperation with Governor Mel Carnahan, designed a framework to help our schools respond to the changing needs of their communities. This response will be facilitated through the expansion of School Children's Health Services as mandated by House Bill 564.

House Bill 564 (HB 564) charged the Departments of Health and Social Services, in consultation with the Commissioner of Education, to provide grants from the Health Initiatives Fund to assist public schools, school districts or local public health departments in expanding School Children's Health Services. To answer this charge, the Departments of Health, Social Services and Elementary and Secondary Education collaborated in the development of the School Children's Health Services Committee. The Committee was charged with the task of developing strategies, plans and protocols for funding efforts to expand School Children's Health Services in Missouri. The intent of HB 564 is to build the capacity within Missouri's school districts to provide school health services that will improve the overall physical, mental and emotional health of children and adolescents.

It is well documented that both mental and physical well-being can be positively affected by timely intervention and the provision of appropriate, affordable and accessible health care to children of school-age. School Children's Health Services are expected to promote healthier life-styles among school-age children and to reduce the need and demand for health care among this population. This is consistent with the goals of Healthy Missourians 2000, which also address achieving universal access, decreasing preventable conditions, promoting

healthy behaviors, reducing health disparities and increasing the availability of school health services. Other benefits that will be derived from the provision of these services include:

- more instructional days for students;
- less time lost by the student due to illness or while receiving care; and
- fewer work days lost for parents or guardians.

The ultimate goal of the program is improved health and educational outcomes for Missouri's children.

The need to improve the health of our children through School Children's Health Services is statistically substantiated. Missouri statistics indicate that an unacceptably high percentage of school-age children receive less than adequate or no health care. This trend toward a decline in the health status of our children must be reversed.

The Missouri School Children's Health Services Committee fully endorses the premise that children learn best when they are enjoying optimal health. The Committee further realizes that schools offer the most accessible and convenient structure for school-age children to obtain health care services. Moreover, the Committee acknowledges that with regard to health services, school districts across Missouri are extremely diverse; they are in many different phases along a continuum working toward the goal of meeting school-age children's health care needs. Based on these tenets, and the belief that every child has the right to receive timely and adequate preventive and primary health services, a plan for implementing the goals for School Children's Health Services as envisioned in HB 564 has been developed.

To achieve these goals, the Committee developed an implementation plan with five basic components. They are:

- **Capacity-building Programs** – planning programs to prepare schools for implementing School Children's Health Service Programs;
- **Generalized School Children's Health Services Programs** – the basic level of services to be provided to school-age children;
- **Intermediate School Children's Health Services Programs** – a program incorporating both generalized and expanded services;
- **Primary Health Care Service Programs** – comprehensive primary care services provided in the school setting; and the
- **Management Training Initiative** – technical assistance to schools and school districts that utilize any of the programs.

Many school districts in Missouri offer no school health services, i.e., they do not utilize the services of a health care professional. Others have less than adequate ratios of health staff to students and offer a less than adequate range of services. The School Children's Health Services Committee has created a plan that will target grants toward schools whose preparation for implementing School Children's Health Services ranges from none (Capacity Building Grants) to readiness to implement a full range of services (Primary Health Care Service Grants). The investment Missouri is making in providing basic health services to all school-age children without regard for enrollment status will pay huge dividends in creating a school-age population with greater potential to learn. As we reap a healthier, better-educated generation of citizens, the impact of this initiative can be expected to evolve into a more productive, creative work force that will benefit all Missourians in the decades to come.

II. The Need

The health status of this generation of America's children is alarming. It is the first generation in the history of our nation to be less healthy than the preceding generation.[1] Malnourishment and lead poisoning affect an estimated five million children across the nation. The incidence of asthma has increased by 60 percent in the last two decades. On the average, school-age children miss 4.6 days of instruction annually due to these and other health-related conditions.[2] The number of teenage suicides has tripled during the last two decades, and about fifteen percent of teens suffer from emotional or mental disorders severe enough to warrant treatment.[3] Excessive drinking is being recorded among younger children, and smoking and drug abuse are on the rise as well. These issues are exacerbated by the following conditions:

- the number of children living in poverty continues to increase;
- the number of families with inadequate or no insurance continues to rise; and
- access to health care becomes more constricted for an increasing number of individuals.

Missouri's children are no exception. They are a portion of the nation's children who have been found to be less healthy than the previous generation. Many of our youths lack access to valuable health services. At the beginning of the 1993-1994 school year, there were 535 public school districts in Missouri with a total enrollment of more than 840,000 children.[4] According to preliminary data received from the Department of Elementary and Secondary Education, there are an additional 98,000 children enrolled in private and parochial schools. This brings the total school enrollment to approximately 938,000. As noted previously, the national illness-related absenteeism rate is 4.6 days per year. In Missouri, this statistic translates into more than four million days of instruction missed annually. Of the 535 public school districts in Missouri, 224 offer no

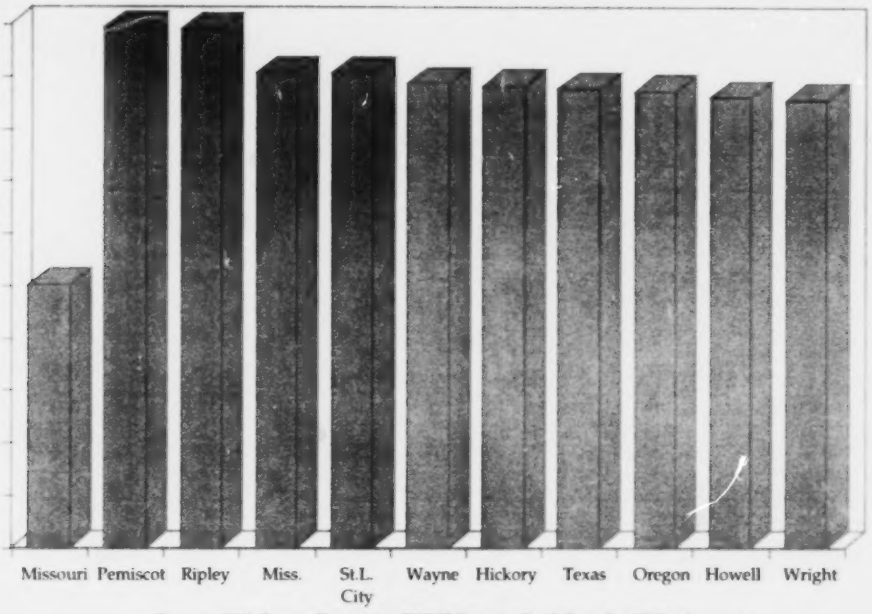
school health services; that is, they do not offer the services of health care professionals. Many of the remaining 311 school districts are unable to offer adequate services as a result of resource limitations.

Compounding these issues, the nation, including Missouri, has been experiencing a decline in the number of available health care professionals in many areas. Inadequate numbers of health care professionals in many Missouri counties create an access barrier. This barrier is intensified by the increasing number of individuals who are medically uninsured or underinsured. Even some who have third-party reimbursement, such as those eligible for Medicaid, find that access to health services is not always guaranteed.

Another barrier to health care services in Missouri is poverty. Not all poor families have access to public insurance plans such as Medicaid. Therefore, although parents are willing to pay for health care services, an increasing number of them cannot afford to do so. Often, uninsured families begin to use emergency rooms as sources of primary or other non-emergent care thus generating unnecessarily high costs to the system. In addition, efforts to obtain care can be delayed until illnesses become acute and emergency care is required. This often results in uncompensated hospital stays that place an economic burden on hospitals and physicians.

Statistics from the 1990 Census indicate that poverty is a real problem in some counties in Missouri (see Figure 1). In Pemiscot and Ripley counties, greater than 40 percent of the school-age children [6-17 years] live below 100 percent of the poverty level. In fourteen other counties, more than 30 percent of the school-age children live in poverty. An additional twenty-eight counties have poverty levels between 20 and 30 percent.[5]

Poverty Risk Ratios for Children Ages 5-17 in Ten Missouri Counties



Source: 1990 Census Data using DHHS Poverty Guidelines for 185% of poverty.
Obtained through the State Center for Health Statistics.

Figure 1

In Pemiscot, Ripley, Dunklin, Wayne and Washington counties, more than 40 percent of all births are registered to mothers with less than twelve years of education.[6] As it relates to accessing health care, evidence suggests that as the educational level of individuals decreases there is a corresponding, although not necessarily a proportional, decrease in the use of health care services. Individuals who are less likely to utilize health care services for themselves are also less likely to access care for their children.

Other indicators of concern include: the numbers of Missouri children for whom abuse or neglect is suspected, deaths among school-age children and high unemployment rates. The combination of several of these factors for children may create significant barriers to accessing health care.

A related area of concern is Missouri's dropout rate. In 1989, the average high school graduation rate for the nation was 79 percent.[7] Twenty-one percent of the nation's students failed to graduate or dropped out. In Missouri, the dropout rate for that same period was 26.5 percent – significantly higher than the national rate.[8] By 1992, Missouri's dropout rate had increased to 26.8 percent.[9] Nevertheless, Missouri has established a goal to increase its high school graduation rate from 72.5 percent in 1991 to 90 percent by the year 2000.[10] This is an important goal, but one that will require the use of every resource the state has at its disposal. Improving the health status of children is critical to ensuring maximum opportunity for educational success.

There is clearly a need to reverse the decline in the health status of Missouri's children. We cannot hope that this matter will correct itself, because it will not. Proactive rather than reactive measures must be employed if we are going to improve the health of our children. Missouri's policy makers have taken the first step in this process. They have identified the health status of school-age children as a matter of concern and have provided funds to assist in correcting the problem. But monies alone will do little to reverse the health status trend. A comprehensive approach to the problem is needed. School Children's Health Services programs, which offer comprehensive screening, preventive services, primary care, and referrals for acute care, need to be implemented. These programs must initially target the funds provided by the Legislature to the areas of greatest need and where residents have the least ability to pay for services. As the health status in these areas begins to improve, then greater attention may be focused on other areas where the need is not as critical.

III. Planning Approach

A. Missouri's Legislative Efforts

To address the overwhelming need to improve the health of Missouri's school-age children, the General Assembly and Governor Mel Carnahan developed an ambitious and progressive approach to increasing access to health services among school-age children. Specifically, on May 14, 1993, the General Assembly passed House Bill 564 (see Appendix A). This bill, in part, is designed to improve access to primary and preventive health care for school-age children. The intent of the bill is to accomplish this through:

- Collaborative practice agreements to expand the provider supply;
- Increased eligibility for and utilization of Medicaid Early Periodic Screening, Diagnosis and Treatment (EPSDT) direct services and administrative case management;
- Schools or school districts' new role as Medicaid providers; and
- A grant funding process for the expansion of School Children's Health Services.

In addition to House Bill 564, the Legislature also passed Senate Bill 380 (see Appendix B), which changed the way funds are distributed for education. It provides a significant amount of new state revenues for schools and outlines a series of funding measures designed for school improvement. Senate Bill 380 (SB 380) complements House Bill 564 in that it authorizes the use of school improvement dollars to provide space and other facilities to accommodate School Children's Health Services. SB 380 also targets monies to school districts to provide special services for children with specially identified educational needs and for those who are at high risk. Funds are also provided for contractual mental health services for children, provided those services are approved by the Department of Mental Health.

B. The School Children's Health Services Committee

The School Children's Health Services Committee was convened to develop implementation plans for School Children's Health Services as outlined in HB 564. Committee membership included representatives from the Departments of Health, Elementary and Secondary Education, Social Services and Mental Health. Also represented were the Missouri Association of School Nurses, public and parochial schools and school districts, the medical community, local health departments, community health centers and the community at-large. Many Committee members also sit on other advisory groups and task forces that are addressing issues related to improving access to quality health services. These include, for example, the Archbishop's Committee on School Health. These extended relationships further the long-range goal of creating systems of services that best meet the needs of the population.

The mission of the Committee was to review legislation relating to the funding of School Children's Health Services and recommend the methodology for initiating the program. The Committee's effort was guided by three of the more salient directives of House Bill 564. The first is that School Children's Health Services in Missouri should be expanded. This was interpreted by the Committee as implicit legislative intent for the provision and, therefore the design, of more expansive and extensive models for School Children's Health Services. The committee responded by designing four models, which may be adapted to meet the needs of different communities.

The second directive of HB 564 is that the Department of Health, in consultation with the Commissioner of Education of the Department of Elementary and Secondary Education, may provide grants from the Health Initiatives Fund to assist in the provision of school health services. The Committee understood this

to mean that a request for proposal [RFP] system should be instituted to distribute funds for the expansion of School Children's Health Services. An RFP will be prepared and issued by the Department of Health in conjunction with the Departments of Social Services and Elementary and Secondary Education. This RFP will delineate the type of grants available, the application process, the expected outcome and the evaluation mechanism.

The third directive of the legislation is that preference in grants should be given to schools, school districts or local health departments where the greater need for School Children's Health Services exists and where the residents have the least ability to pay. The committee responded to this directive by selecting both health and financial criteria (abuse/neglect, poverty, educational level of mothers, school-age mortality, unemployment) which, when stratified, would permit the identification of areas with the greatest needs.

A statistical analysis of the county indicators was performed by the State Center for Health Statistics. Risk ratios for each indicator were calculated and ranked. Although extrapolation about the need of a county cannot be made from individual indicators, the statistics provide insight into the types of health care barriers that might exist in specific areas of the state. This information is found in the spreadsheets in Appendix C. The counties that are at the top of the list on the ranked spreadsheets are determined statistically to be the most needy by the indicators analyzed. In addition to the health status and financial indicators, the Committee also evaluated the degree to which counties were medically underserved, whether school districts in the county were providing any health services, what the ratio of health care professionals to students was and what type of preparation the professionals had received. Maps representing some of these criteria are shown in Appendix D. The Committee also examined the available Early Periodic Screening, Diagnosis and Treatment utilization rates.

Counties with combined indicator rates that are consistently worse than the average for the state must be considered by the planners and those who implement the School Children's Health Services Programs as priority areas where grants and other resources might be directed initially. Those schools, school districts or service areas identified by this process will be encouraged to apply for grants, which are designed to meet the health needs of the school-age population. The ten counties with the highest overall risk ratios are illustrated in Figure 2. Overall risk ratios were calculated by adding the risk ratios for unemployment, school-age deaths, mothers with less than a 12th grade education, child abuse and children living under 185 percent of poverty to a base line of 95. The risk ratios for Missouri are equal to one.

Ten Missouri Counties with Highest Overall Risk Ratios

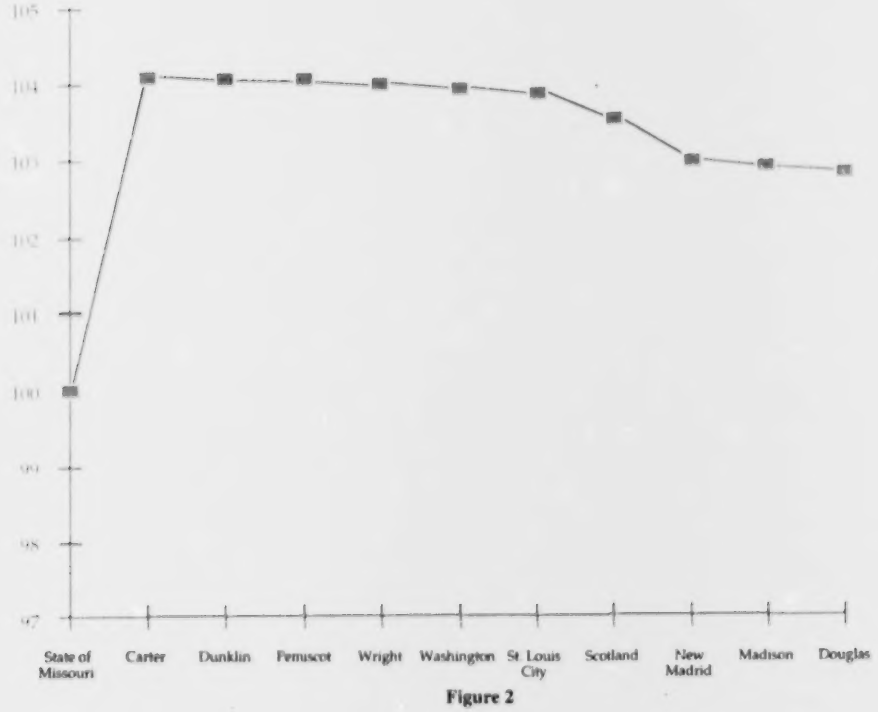


Figure 2

The Committee endeavored to address the needs of all children when developing their recommendations. Data was most accessible on public school children since there is a centralized data collection point through the Department of Elementary and Secondary Education. Because there are many types of private and parochial schools, there is no such centralized data collection agency for this population of students. For this reason, health status information on children enrolled in non-public schools was unobtainable. However, the Committee has assumed that the health care needs of the public schools are reflective or symptomatic of the needs of all Missouri's children since this is a large sampling. All applications for School Health Services grants from public schools, school districts or local health agencies should be developed in collaboration with the private and parochial schools within their service areas and include plans to serve all school-age children within those jurisdictional areas. Special efforts will be needed to serve school-age children who are currently not enrolled in any educational setting.

C. Objectives of School Children's Health Services

With these issues in mind, the following objectives have been established by the Committee to begin in fiscal year 1995:

- Enroll 75 percent of Capacity-building grantees as Medicaid providers within 18 months of award;
- Implement Generalized School Children's Health Service programs within 18 months in 10% of the school districts that currently have inadequate or no existing health services;
- Implement Intermediate School Children's Health Service programs within 12 months in 10 school districts or service areas;
- Establish Primary Care Services for Missouri's school-age population over a period of 12 months in four service areas;
- In collaboration with the Department of Social Services, support the implementation within 18 months of Medicaid Case Management programs in at least 30 schools or school districts;
- Facilitate collaborative arrangements for direct services between school districts and health care providers, (e.g., local health departments, community health centers, physicians and hospitals), within 12 months in 10% of Missouri's school districts;
- Provide education and training in the delivery of School Children's Health Services for a minimum of 1,000 educators and health service providers over a period of 12 months;
- Within three years, reduce by 20% the rate of absenteeism in school districts that have implemented School Children's Health Services programs .

IV. Program Design

In Missouri, School Children's Health Services will be provided through programs tailored to the needs of the community. Based upon a review of county-level data describing the health status of Missouri's children and the current availability of programs to serve these needs, the Committee designed four basic program models:

- Capacity-building Programs;
- Generalized School Children's Health Services Programs;
- Intermediate School Children's Health Services Programs; and
- Primary Health Care Service Programs.

A general overview of these four program models follows. It is important to note that applicants for these grants (public schools, public school districts and local health departments) will be able to adapt the models to meet the specific needs of the geographic area(s) to be served. In addition, applicants may be asked to present an analysis of the need for the area to be served. Further, successful grantees will be required to participate in a program evaluation that will include ongoing monitoring and data collection. Specifics regarding these components will be described in the RFP to be developed by the Department of Health in collaboration with the Departments of Social Services and Elementary and Secondary Education.

It is the responsibility of the community to ensure that the service program, which it adopts, addresses the needs of the entire community of school-age children and not only those in the public school system. Also, providers who participate in these programs must be committed to serve every child who is in need of service, not only those with third-party reimbursement such as Medicaid or private insurance. These two issues must be addressed regardless of the service model adopted.

Also described in this section is the Management Training Initiative that will be implemented by the Department of Health. This initiative is designed to enhance the ability of school health services personnel to develop and administer a school health service program.

A. Capacity-building Programs

In Missouri, there are medically underserved areas where it would be extremely difficult to implement school health services. For these areas, the Committee proposes capacity-building programs. Such programs consist of grants awarded specifically for the purpose of identifying, coordinating and initiating the community-based structure necessary to support School Children's Health Services at the basic level. Staffing for this program may include one or more full-time or part-time employees designated to perform capacity-building activities including:

- Community education efforts that promote the advantages of School Children's Health Services to school and school district personnel and community leaders;
- Formation of a community advisory committee to design a program appropriate for the community;
- Identification of financial, physical and human resources in the community or other resources that might be available to the community for the provision of health services to school-age children;
- Determination of service needs; and
- Coordination of community-based organizations that sponsor youth activities.

In the year following the completion of these activities, the schools or school districts to which these grants are awarded will be expected to implement at least an adaptation of the generalized service program.

The Committee anticipates awarding at least 15 capacity-building grants per year. Grants will be for up to $20,000 with a funding cycle of one year. If grants are awarded for less than the maximum amount, the remaining funds will be used to increase the total number of grants. The scope of service and other conditions will be outlined in the RFP.

B. Generalized School Children's Health Services Programs

This program provides basic educational, nutritional, diagnostic, preventive and minor health maintenance services. It is designed to introduce School Children's Health Services to schools, school districts or service areas where these services are either nonexistent or fail to meet the basic health needs of school-age children. Services offered by this program may be by contract with local health service providers or provided by employees of the school or school district operating the program. School district employees who perform assessments and management of illnesses and injuries must comply with the guidelines established by the Missouri Departments of Health and Elementary and Secondary Education or with standing orders and protocols of a physician in the service area. It is strongly encouraged that the schools or school districts operating this program become Medicaid providers.

1. Components of the Generalized School Children's Health Services Program

The Generalized School Children's Health Services program should include very basic health care and health-related activities including those services described in the *Manual for School Health Programs,* (Missouri Department of Elementary and Secondary Education, January 1994) and the *Guidelines for Special Health Care Procedures in Missouri Schools,* (Missouri Department of Health, July 1990). These services include:

a) Health and health-related records management

- immunization records
- special health needs
- student health records, e.g., health and developmental history
- injury reports
- emergency information
- annual reports according to state departments of health and education specifications

b) Age-appropriate and population-based screenings, referrals and counseling

- vision screening
- hearing, spinal and dental screenings
- tuberculin testing
- overall health risk appraisal

c) Assessments and management of special health care needs

- basic emergency and first aid care
- assessment and referral of minor illnesses
- prevention and control of communicable disease

- basic health-related services for students with disabilities including consultation related to the needs of students who are technology-dependent
- case management and coordination of health-related information between home, school and community
- written plan for management of emergencies for children and youth at risk for life-threatening events
- system for the documentation and safe administration of medications in the school setting

d) Health counseling, promotion and instruction

- parent and teacher conferences concerning student health
- self-care to increase student self-sufficiency
- healthy life-style habits, e.g., personal hygiene
- student assistance activities
- injury prevention/personal safety
- consultation to teachers for health education resources

e) Environmental health and safety

- promotion of a positive social climate
- injury surveillance and formation of a safety committee
- collaboration with community health and public safety officials to ensure physically safe environments

f) Coordination activities

- participation in the coordination and integration of the efforts of the faculty, staff and administrative personnel for multiple school health-related programs including: student assistance, special education, health education, risk management, counseling/psychology, food service, environmental health, physical education and vocational and home economics
- participation in community-based school health advisory groups.

2. Staffing and Management Arrangements for the Generalized Program

This service model assumes that an appropriately trained school health coordinator and provider (e.g., nurse, health educator, counselor or social worker) with the cooperation and collaboration of other school district or school personnel (e.g., classroom teacher, physical education instructor and nutritionist) may serve up to 1,500 students. Determining whether the services would be required on a full-time or part-time basis would be dependent on the number of students in the school district, the complexity of their needs, the resources available and other restricting geographic and demographic characteristics. The case management of students with needs for special health services or students at high risk will be the responsibility of specialists who are appropriately qualified to meet those needs. Community involvement will be essential because of the wide range of services being provided. The coordinator will be expected to form a community advisory committee to advise and assist in the identification and use of community resources.

The Committee anticipates that a minimum of 31 grants will be awarded annually for the generalized programs. Grants will be awarded for up to $45,000 each. The funding cycle will be for two years. A new application will be required for the second year. Funds from grants not awarded at the maximum level will be used to increase the total number of grants. The scope of service and other conditions for these grants will be outlined in the RFP.

C. Intermediate School Children's Health Services Program

This service model builds on the services provided by the generalized program. It is designed to expand the services currently being provided by those schools, school districts or regions that otherwise would continue to provide basic or limited services due to funding and other restrictions. In order to participate in this program, schools or school districts must be satisfactorily providing the services listed under the generalized model. Intermediate School Children's Health Services may be provided through:

- contracts with health care professionals who would be available on the school site or at their private offices;
- public health professionals who work for and within the school system; or
- through linkages with other community health organizations.

The schools or school districts utilizing this model will be strongly encouraged to become Medicaid providers where appropriate. They shall seek to maintain their present funding sources and to investigate new ones. The program focuses on early identification of health problems through school-based diagnosis, treatment and follow-up of common health concerns. The staff will be equipped to handle the case management responsibilities associated with the health needs of students with special needs. This will include on-site assessment and management. Referral will be made for those cases where specialized attention is warranted.

1. Components of the Intermediate School Children's Health Services Program

This model includes all the services of the generalized model and expands on those activities as described in the *Manual for School Health Programs,* (Missouri Department of Elementary and Secondary Education, January 1994) and the *Guidelines for Special Health Care Procedures in Missouri Schools,* (Missouri Department of Health, July 1990). Additional services might include:

a) Secondary and "condition specific" screenings, referrals and counseling

- vision screenings (muscle balance, color, near and distance acuity)
- tympanometry screening
- screening for eating disorders
- expanded cardiovascular screening, e.g., fitness screening

b) Assessment and management of special health care needs

- assessment and management of acute and chronic conditions under standing orders and protocols, e.g., student with asthma
- consultation for students who are technology-dependent
- on-site immunizations in collaboration with the medical community
- aftercare for students with emotional disabilities and past history of substance abuse

c) Health counseling, promotion and instruction

- individual and small group self-care sessions for students with chronic health conditions
- individual and small group sessions in collaboration with other school or community health personnel for students with psychosocial disorders, e.g., depression, violence, psychosomatic disorders
- student health fairs

- individual counseling related to the results of health risk appraisals
- specific health instruction as follow-up to health risk appraisals

d) Environmental health and safety

- school-wide campaigns to reduce violence
- assessment of the physical and social-emotional climate
- collaboration with community health and public safety officials to ensure physically safe environments.

2. Staffing and Management Arrangements for the Intermediate Program

This program assumes a more integrated, collaborative and coordinated team approach. School or school district personnel serve as members of the school health team under the leadership of a school health coordinator and provider. The interdisciplinary school health team consisting of nurse, social worker, health educator, mental health counselor, etc., will assess and evaluate students' needs and develop care plans, which they will then implement. On-site or off-site services are provided for illness, minor injuries and screenings. Prevention, health promotion and case management for students with special health care needs or at high risk are the responsibility of specialists whose qualifications are appropriate to meet these needs. The recommended ratio of students to health care providers under this model is about 1,000:1 with adjustments for geographic and demographic restrictions.

The School Health Committee envisions awarding at least 10 grants per year for intermediate programs. Grants for intermediate services will be for up to $200,000 each. Grants will have a funding cycle of up to two years. Applications must be made each year for the initial grants and renewals. Monies left over from partial awards will be used to increase the number of grants awarded. The scope of service and other conditions for these grants will be outlined in the RFP.

D. Primary Health Care Service Program

The Primary Health Care Service program incorporates the basic services of the generalized program, the remedial services of the intermediate program and adds laboratory testing, treatment and developmental and preventive services. This program provides for the establishment of, or contractual relations with, school-based or school-linked clinics or other community-based health care providers. The schools, school districts or health care providers operating this program must become Medicaid providers. They must provide both Medicaid Direct Services and Administrative Case Management. It is expected that the schools or school districts will maintain their present funding sources as well as seek new ones.

This program is intended to provide an array of primary care services. To qualify for the provision of services under this model, the schools or school districts must be providing all the services of the intermediate model or its adaptation. The services provided by this program are expected to contribute significantly to the improved mental, physical and emotional well-being of the population served.

1. Components of the Primary Care Program

The Primary Care component will build on the generalized and intermediate services and activities as described in the *Manual for School Health Programs,* (Missouri Department of Elementary and Secondary Education, January 1994) and the *Guidelines for Special Health Care Procedures in Missouri Schools,* (Missouri Department of Health, July 1990). The services to be provided may be determined by a school health advisory committee and must have parental support and consent. Schools or school districts utilizing this model become primary care providers. Services offered match those offered by community primary care providers and will include but are not limited to the following:

a) Assessments, diagnostic and treatment services for common childhood and adolescent health conditions with referral for follow-up care

Elementary Students

- hypertension
- allergies
- hyperlipedemia
- eating disorders
- upper respiratory infections
- gastrointestinal disorders
- musculoskeletal complaints
- neuro-developmental problems
- contagious and infectious diseases
- physical and emotional abuse

Secondary Students

- hypertension
- hyperlipedemia
- eating disorders
- tobacco use
- alcohol and drug use
- sexually transmitted diseases
- depression/suicide risk
- physical and emotional abuse
- reproductive health services, e.g., pregnancy testing, referral for care

b) Health counseling, promotion and instruction

- individual and small group counseling for students diagnosed with psycho-social disorders
- behavior management programs for use in individual and small group sessions
- follow-up counseling services for students
- day treatment as necessary

c) Environmental health and safety

- developmental contributions for improvement of environmental health programs based on experiences within the primary health care center

d) Coordination activities

- integration of primary health care services into other school and community student health activities.

2. Staffing and Management Arrangements for Primary Care Programs

This program is designed to accommodate a health care team providing primary care services on site at the school, in the case of a school-based clinic, or through linkages with off-site community health care providers, in the case of a school-linked clinic. In either circumstance, the health care team will consist of one or more physician specialists (e.g., internal medicine, pediatrics), nurse practitioner or physician assistant, nurse, nutritionist, health educator, substance abuse counselor, clinical social worker and clerical staff. Referrals will be made for specialized care where necessary.

When the services are provided through contract with a community-based primary care provider, staffing the clinic is the responsibility of the provider regardless of the clinic site. The provider may assume all billing responsibilities or bill only for those services for which the contract does not provide, e.g., billing to private insurance. If the primary care program is operated by the school or school district, then staffing and billing remain the responsibility of the school or school district. Under the latter arrangement, the school or school district becomes a primary care provider.

The Committee recommends that a minimum of four grants be awarded annually for primary care programs. The maximum single award would be for up to $450,000 per year. The funding cycle for these grants is three years. Applications must be made annually for new grants or renewals. The scope of service and other conditions for these grants will be outlined in the RFP.

E. Management Training Initiative

Funding will also be provided to support a management training initiative for school health services personnel who are involved directly or indirectly with the school health team. This training will help them acquire the school health management and administrative skills necessary to administer school health service programs. As conceived, the training program will consist of a base program and satellite outposts established to reach all geographic areas of the state. Modules will be developed for different disciplines, i.e., counselor, social worker, nutritionist, public health nurse, physician assistant or nurse practitioner, physician, health educator, school nurse and clerical staff, to address the specific skill needs of each. Issues such as violence prevention, psycho-social assessments and services, needs of high-risk youths, comprehensive services for children with special health care needs and other adolescent health issues will receive special focus.

Schools or school districts may not participate in any of the programs prior to attending a management training session that will be offered by the Department of Health in cooperation with the state's institutions of higher learning. Information about the program will continue to evolve as adaptations are made to accommodate the special needs of local communities. This information will need to be communicated directly and succinctly to those involved in the administration and provision of services. In addition to the initial training session, there will be follow-up in-services. The purpose of the in-service sessions is to ensure that the guidelines for operating the programs are being followed and to impart new information as needed.

In the first year, the Department of Health expects to train 1,000 professionals across the state for a total cost of up to $200,000. The funding cycle for the training initiative is three years with the second and third year dedicated to in-service training for providers.

Missouri's program will provide technical assistance to those areas where the need for such assistance is indicated. The technical assistance provided to schools, school districts or the health care providers serving local school communities will be directed toward upgrading the skills of school health coordinators, educators and other members of the health service team. Such technical assistance will also assist schools or school districts in identifying alternative funding sources. These may include private foundations as well as other governmental sources such as Medicaid. Alternative funding sources will allow programs initiated by the state-sponsored grants to develop stable and long-term funding. Therefore, schools and school districts should be encouraged to become Medicaid providers. Schools or school districts with an eligible population of Medicaid registrants will be encouraged and assisted to participate in Medicaid's EPSDT Direct Services and Administrative Case Management programs. The technical assistance provided by the Departments of Health and Social Services will also aid those who indicate a desire to apply for grants or other funding but lack the expertise to do so.

The total budget required to implement the School Children's Health Service program is summarized on page 29. An illustration of the services provided under each model and the progressive relationship between models is found on page 30.

Missouri School Children's Health Services Program
FY95 Budget Summary

Type of Grant	*Maximum Amount per Grant*	*Maximum Number of Grants*	*Total Cost*
Capacity-building Grants (Grants to conduct planning and assessment activities to prepare areas to implement school health services.)	up to $20,000	15	$300,000
Generalized School Children's Health Services Grants (Basic model providing educational, nutritional, detection, prevention and minor maintenance activities.)	up to $45,000	31	$1,395,000
Intermediate School Children's Health Services Grants (Expands upon basic service model incorporating early identification, treatment and/or referral of health problems.)	up to $200,000	10	$2,000,000
Primary Health Care Service Grants (Provides entire scope of services from basic screening through diagnostic, treatment and referral services. Schools become primary health care providers.)	up to $450,000	4	$1,800,000
Subtotals		**60**	**$5,495,000**
Management Training Initiative (Training for school health management personnel to enhance administrative skills.)	$200*	1,000**	$200,000
Total			**$5,695,000**

* Rate per trainee
** Maximum number to be trained

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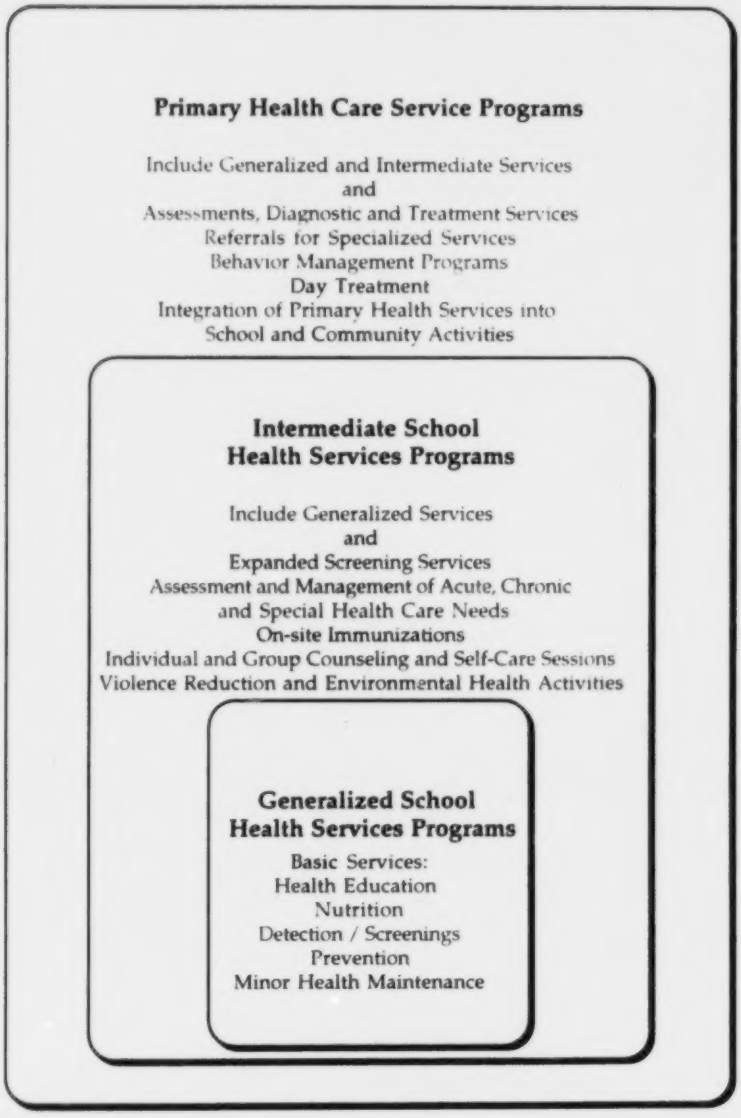
School Children's Health Services Model Programs Schematic



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V. Intended Impact of the Program

The School Children's Health Services programs proposed for Missouri's schools are adaptations of models that have been used in other states, e.g., Florida, Utah, New Mexico, Oregon, Maryland. These models have been carefully analyzed for their impact in the communities where they have been introduced. Noting the impact of those programs, the Committee expects that the proposed School Children's Health Service programs will make a difference for Missouri's children in the following ways:

- Provide significantly improved access to preventive and primary care services;
- Provide early detection of medical and emotional problems through increased screening and other intervention;
- Reduce the rate of absenteeism directly attributable to health-related factors and increase the number of instructional days per year; and
- Reduce the failure or dropout rate among students.

A. Improved Access to Care

The first and most important objective of the School Children's Health Services program is assuring access to care. Some individuals may have voluntarily chosen not to access health care services. Others may have been unable to access care due to poverty, an inadequate supply of providers, transportation barriers or providers' refusal to accept certain forms of medical insurance. However, services must be provided to those who do not have access to care regardless of the reason. The four program models are designed to minimize access barriers.

B. Early Detection of Medical and Emotional Problems

Each model proposed by the School Children's Health Services Committee includes screening and/or assessment as a basic service. Existing evidence reviewed suggests that early intervention averts serious medical episodes through early detection and crisis management of high-risk conditions.[11] This was especially evident in programs where early intervention was performed through counseling for:

- drug and alcohol use or abuse; and
- emotional problems, including tendency for suicide, stemming from physical, mental or sexual abuse.

Some suicides and other forms of self-harm have been averted because counselors were able to detect the tendency for such behaviors and address them.[12] The detection of adverse mental or emotional states (e.g., depression, low self-esteem, suicidal tendencies) serves not only to facilitate treatment, but also enhances the educational process. Through this process, educators are better able to understand and respond to the special needs of these children.

C. Reduced Absenteeism

Obviously, a child who is ill is more likely to miss school than one who is healthy. By providing early detection of medical and emotional problems, episodes of illness that keep children out of school are averted. School Children's Health Service programs also facilitate the educational process in ways that might not be readily apparent. Although a student may be physically present in the classroom, there is no guarantee that learning is taking place. Because of undiagnosed illness, malnourishment, preoccupation with adverse family issues, etc., the child's mental alertness may be so severely impaired that information

cannot be properly assimilated and processed. The child is physically present but mentally absent. School Children's Health Service programs, which emphasize prevention and early detection, reduce both physical and mental absenteeism.

Although it is known that reduced episodes of illness increase the number of instructional days per year for school-age children, this statistic is not currently compiled in Missouri and therefore, is not available. In order to quantify the impact of School Children's Health Service programs in reducing absenteeism for children at school, a data collection process will be implemented through a collaborative effort of the Departments of Health and Elementary and Secondary Education.

D. Reduce the Failure or Dropout Rate

Studies have shown that there is an association between dropping out of school and unemployment, poverty and poor health later in life. During adolescence, dropping out of school is associated with multiple social and health problems including substance abuse, delinquency, intentional and unintentional injury and unintended pregnancy.[13] Some of the precursors to dropping out include:

- low academic achievement;
- low attachment to school;
- adverse peer influence;
- inadequate family management and parental supervision;
- parental substance abuse;
- sensation-seeking behavior;
- early use of tobacco, alcohol or marijuana;
- early aggressive behavior; or
- diminished self-efficacy or self-esteem.[14]

Some of these precursors are directly addressed by the proposed School Children's Health Services Program through counseling and other early intervention measures. These school health measures, in conjunction with the intervention programs proposed by the Chronic Disease Prevention and Health Promotion Division of the Department of Health, will assist Missouri in reaching its goal of a 90 percent high school graduation rate by the year 2000. This lowered dropout rate will contribute significantly to a better-qualified work force with fewer chronic health problems.

VI. Recommended Strategies

The success of new initiatives is often dependent on the foresight exercised during the planning phases and the identification and elimination of implementation obstacles. Recognizing this, the School Children's Health Services Committee submits the following recommendations for implementation:

- Ensure interagency support and cooperation through an interagency agreement among the Departments of Health, Elementary and Secondary Education, Social Services and Mental Health;

- Ensure that schools and school districts have properly identified the scope and depth of the health care role they can play, considering their resources and commitment and the needs of their communities;

- Involve parents, students, school nurses, counselors, teachers, physicians and other community health professionals in the development of proposals and plans for the improvement and implementation of School Children's Health Services;

- Encourage cooperation among educators, school health professionals, physicians and managed care providers in the community since the collaboration of these groups will greatly enhance the success of the school health program in the community;

- Encourage long-range financial planning by schools and school districts to assure stable funding sources and promote self-sufficiency of programs;

- Encourage cooperation among public, private and parochial schools and collaboration among community organizations and programs necessary to facilitate implementation and to harness community resources;

- Include community education and outreach to the existing school nurses, counselors and teachers to explain the goals and objectives of the school health program and the expected outcomes;

- Design and conduct workshops regarding the program's broad mission to reverse the negative health status trend among school-age children. As necessary, these workshops should be tailored to address the specific concerns of the various stakeholder groups including school staff, medical and nursing professionals, parents, students and members of the community;

- Encourage the recruitment and employment of experienced school health staff who are committed to working with school-age children;

- Encourage the hiring of school health staff with close ethnic and cultural identification with the community;

- Provide information concerning the availability of alternate sources of funding for School Children's Health Services as part of the technical assistance provided by the Department of Health;

- Provide technical assistance and information, as appropriate, so that schools, school districts or service areas are adequately prepared to submit grant applications;

- Provide information concerning the availability of Medicaid funds and how those funds may be utilized in the provision of health services to school-age children. Schools and school districts must be encouraged to become Medicaid providers; and

- Design a uniform data collection mechanism that will facilitate on-going monitoring of the program and an evaluation of the success in meeting the stated objectives.

VII. Summary

The School Children's Health Services Committee has designed an implementation plan for the provision of School Children's Health Services in Missouri. The plan is far-reaching and intended to address the health needs of all school-age children. The Committee has incorporated capacity-building programs, which are intended to assist districts that currently provide no school health services. Capacity-building grants will prepare these districts to progress into the more comprehensive phases of the program. Other districts or regions are currently ready to benefit from the Generalized, Intermediate or Primary Care grants. All districts or service areas will have access to the Management Training Initiative.

The Departments of Health, Social Services, Education and Mental Health will continue to work collaboratively to ensure that the School Children's Health Services program appropriately serves the students, families and communities for which it was designed. The ultimate goal is to provide access to School Children's Health Services for all of Missouri's children. We can not hope to touch every child immediately, but the process has begun. As Missourians, we must institutionalize our commitment to long-term, school-based health services for our children and youth.

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IX. Glossary

As used in this report the following terms mean:

Administrative Case Management - management services that assist individuals who are eligible under the Medicaid plan to gain access to needed medical, social, educational and other services. It includes the collection of information on the health care needs of the child, making (and following up on) referrals as needed, maintaining a health history and activating the examination/diagnostic/treatment 'loop.'

Comprehensive school health - a program relating to health issues in the school setting that is designed to protect and promote the health and well-being of students. These programs have traditionally included health services, a healthful school environment and health education. It should also include, but not be limited to: guidance and counseling; physical education; food service; social work; and physical and mental health screening, diagnosis, treatment and referral.

Direct services - one of the three major parts of the Medicaid EPSDT program in Missouri. Direct services include the provision of occupational, physical and speech evaluation therapy and psychological counseling.

Family Practitioner - a primary care provider including a licensed physician, nurse practitioner, primary care physician sponsor or a contracted primary care health provider plan approved by the parent, guardian or legal custodian of a school-age child.

Health Initiatives Fund - a fund established in the state treasury by RSMo 383.125, Section 23 that provides monies to support various specified health programs.

Health services - prevention, assessment and management services relating to the physical, mental, emotional, psycho-social and environmental state or well-being of an individual.

Health status - the state of a child's physical, mental and emotional health which includes his/her environmental and psycho-social condition, i.e., the level of poverty, access to health care, incidence of disease prevalence, etc.

Most accessible care - care or services that reach the most children where they normally are during school hours, or where children are most likely to participate with the least obstacles to participation and may include but shall not be limited to private, public or parochial schools, learning centers, preschools, child care facilities, common community gathering places, licensed health care facilities, physicians' offices and community centers and may also include the use of traveling medical professions.

Need - inability to access health care services because of financial, sociological, physical or demographical barriers.

No existing health services - no formal participation of health care providers and no provision of services to children within the school setting or no qualified referrals.

Primary care - Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their free participation and at a cost that the community, county and state can afford. It forms an integral part both of the health system, of which it is the nucleus, and of the overall social and economic development of the community.

Service area - a geographical region of the state where collaboration by health care providers and integration of health services are necessary for the provision of preventive and primary health care services to the school-age population of the region; or the public school district, if the school district elects to be a Medicaid provider, or an area determined by the Department of Social Services at the time a public school within a school district elects to be a Medicaid provider.

School-age children - all children under the age of nineteen without regard to whether they are currently enrolled in any school and without regard to what public, private, parochial or home school they may attend.

School Children's Health Services - services including: immunization; screening for physical or mental disease, disability or injury; treatment of pathological disease or injury; emergency medical treatment or first aid; or administration of drugs or treatment as ordered by the child's family practitioner.

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XII. Appendices

Appendix A: Sections of House Bill 564

Appendix B: Sections of Senate Bill 380

Appendix C: Spreadsheets

Appendix D: Maps and charts displaying distribution of key health status indicators in Missouri counties

Appendix A

Relevant Sections of
House Bill 564

House Bill 564
Sections 1-9

Section 1. 1. As used in sections 1 to 9 of this act the following terms mean:

(1) "Family practitioner", a primary care provider including a licensed physician, nurse practitioner or primary care physician sponsor as defined in subdivision (4) of subsection 1 of section 208.166, RSMo, or a primary care contracted health provider plan, approved by the parent, guardian or legal custodian of a school age child

pursuant to section 5 of this act;

(2) "Most accessible care", that care or services which reaches the most children where they normally are during school hours or where children are most likely to participate with the least obstacles to participation and may include but shall not be limited to private, public or parochial schools, learning centers, preschools, child care facilities, common community gathering places, licensed health care facilities, physicians' offices and community centers and may also include the use of travelling medical professionals;

(3) "School age children", all children under the age of nineteen without regard to whether they are currently enrolled in any school and without regard to what public, private, parochial or home school they may attend;

(4) "School children health services", services including immunization, screening for physical or mental disease, disability or injury, treatment of pathological disease or injury, emergency medical treatment or first aid, or administration of drugs or treatment as ordered by the child's family practitioner, provided that the term shall only include the enumerated services and services directly related to the services enumerated herein;

(5) "Service area", the public school district, if the school district elects to be a Medicaid provider, or an area determined by the department of social services at the time a public school within a school district elects to be a Medicaid provider.

2. Sections 1 to 9 of this act shall not be severable from each other.

Section 2. Subject to appropriation, the directors of the departments of health and social services, in consultation with the commissioner of education of the department of elementary and secondary education, may provide grants from the health initiatives fund to assist public schools, public school districts, or local public health departments in expanding school children health services for all school age children. Preference in grants shall be given based on the greater need for school children health services and the least ability to fund such services. The directors shall jointly promulgate rules and regulations governing the grants pursuant to sections 30 and 35 of this act. The director of social services may also provide Medicaid payment incentives.

Section 3. 1. The departments of social services and elementary and secondary education shall develop a plan to encourage public schools and school districts to be Medicaid providers and to provide the most accessible care to school age children. A public school district, or a public school within any district, may elect to function as and be compensated for acting as a provider of Medicaid services. Pursuant to state and federal laws and regulations, a public school or school district shall, upon such election, provide such Medicaid services to all Medicaid-eligible school age children located in the service area of the school or district electing to be a Medicaid provider. The public school or school district may elect to provide services under subdivision (1) or (2) of this subsection or to provide services under both subdivisions

(1) and (2). Based upon its election, the public school or school district shall provide the following Medicaid services:

(1) Early Periodic Screening, Diagnosis, and Treatment (EPSDT) services of the Medicaid program as provided in subdivision (11) of subsection 1 of section 208.152, RSMo, subject to the provisions of section 5 of this act;

(2) Primary and preventive health care services to school age children who are eligible for Medicaid services under section 208.151, RSMo, subject to the provisions of section 5 of this act.

2. The department of social services and the public school or school district shall, by written agreement, determine the scope of EPSDT or primary and preventive health services to be provided by the public school or school district. The scope of services offered shall be designed to encourage the public school or school district to participate as a Medicaid provider.

3. EPSDT services in subdivision (1) of subsection 1 of this section may be provided by school district personnel.

4. Primary health care services may be provided by:

(1) Federally qualified health centers;

(2) City, county or city and county health departments;

(3) Federally certified rural health clinics; or

(4) Physicians, hospitals, or other licensed providers in the community in which the school is located.

Such services shall be by contract with a partic-

ipating school district. A school district shall include provisions for the maintenance of medical records and other administrative tasks as are required by the department of social services in contracts executed under the provisions of this subsection.

5. If a school district is unable to contract for primary health care services pursuant to subdivisions (1) to (4) of subsection 4 of this section, then it may employ the appropriate employees and medical professionals as required by the Medicaid program to provide Medicaid services. Screening, diagnosis, and treatments performed by school district employees pursuant to the provisions of this act shall be performed under standing orders and protocols of a physician whose service area encompasses all of or part of the city or county in which the school is located.

Section 4. 1. The director of the department of social services shall at least annually determine the amount of money each public school district which elects to participate as a Medicaid provider shall contribute to underwrite the costs associated with the services provided for in section 3 of this act. Each public school district shall be provided the assessment for each school year by the director of the department of social services. Notice of each district's assessment shall also be provided to the commissioner of the office of administration.

2. (1) The office of administration, the department of social services and the department of elementary and secondary education shall develop procedures whereby public schools or school

districts may arrange to have a portion of the disbursement which they are to receive pursuant to section 163.031, RSMo, transferred to the health initiatives fund established in section 23 of this act for the purpose of earning federal funds pursuant to the intergovernmental transfer provisions of the federal Medicaid law, 42 USC 1396, et seq. The office of administration, the department of social services and the department of elementary and secondary education shall promulgate such rules as may be necessary to implement the provisions of this subsection.

(2) Public schools or school districts participating in this transfer arrangement shall receive the original transferred amount plus federal funds. The original transferred amount plus federal funds shall not be less than two hundred percent of the original transferred amount. The department of social services shall determine such percentage by a formula established by rule and regulation.

(3) The original amount transferred on behalf of the school or school district to the health initiatives fund shall be disbursed pursuant to section 163.031, RSMo, to the participating school or school district and shall be deposited by such school or district in the same manner as are all other moneys disbursed pursuant to section 163.031, RSMo. The federal funds shall be disbursed to the school or school district directly, shall not be subject to section 163.031, RSMo, and shall be used for school health purposes or programs used to generate Medicaid funds.

(4) The procedures developed pursuant to this

section shall assure that:

(a) Public schools or school districts shall not receive less money than they would have otherwise received; and

(b) Nonparticipating public schools or school districts shall not receive their money at a later time than they would have otherwise received their money; and

(c) Participating public schools or school districts shall not receive their money at a later time than they would have otherwise received their money, except with their express written consent.

3. If a public school or school district which elects to be a Medicaid provider and to contribute to the costs associated with providing EPSDT services and enhanced primary and preventive care to Medicaid eligible children in the service area has a disproportionate number of eligible resident children not included in the calculation of state funding under section 163.081, RSMo, then the department of social services shall work with that public school or school district to ensure the most accessible care for school age children and the department of social services shall commit general revenue funds necessary to ensure access to EPSDT services and primary and preventive health services for all eligible resident children. The department may also make arrangements with health care service providers listed in subsection 4 of section 3 of this act to assist in providing such services in the service area.

Section 5. 1. A public school or school district

may establish an advisory committee to review and advise on the services to be offered. Advisory committees shall be composed of an appropriate mix of parents, teachers, health professionals, administrators and students. The advisory committee shall monitor the delivery of services under sections 1 to 9 of this act and may advise the public school or school district regarding any changes or improvements in the delivery of services which they believe should be adopted. Any public school or school district which has existing committees of similar composition may use those committees for the purposes established herein in lieu of establishing another advisory committee.

2. Before providing any services under sections 1 to 9 of this act, the school, school district, or contractor shall provide each parent or guardian with a consent form and checklist of services to be provided and shall request each parent and guardian to specify those services which may not be provided to his or her child. No services shall be provided which the parent or guardian has specifically indicated may not be provided. If the public school or school district elects to include referral for contraceptive devices and contraceptive drugs in the services to be provided to children, then the check list shall include a specific item stating that health services may include referral to the family practitioner for contraceptive devices and contraceptive drugs. No referral for contraceptive devices or contraceptive drugs shall be made unless the parent, guardian or legal custodian affirmatively selects such

services. No service shall be provided nor referral made for services which are not included in either section 208.152, RSMo, or subdivision (4) of subsection 1 of section 1 of this act.

3. School personnel shall make a reasonable effort to identify the family practitioner for each school age child six years or older by asking the parent, guardian or legal custodian of the child. The school may also at this time ask the parent, guardian or legal custodian to identify the family practitioner for children under age six. The fact that a family practitioner has a contractual relationship with the public school or school district shall not prohibit the family practitioner from being selected by the parent, guardian, or legal custodian to be the designated family practitioner for his child. If the family does not identify a family practitioner, the school may not recommend a specific practitioner or practitioners and shall provide the parent, guardian or legal custodian a randomly selected list of no fewer than twenty-five or a list of all family practitioners who practice in the service area. The parent, guardian or legal custodian may change the selection of the family practitioner at any time by notice to the school. The school shall also provide the parent, guardian or legal custodian the opportunity to provide relevant medical history on the child. At the beginning of each school year, the school shall make a reasonable effort to update the information on the family practitioner.

4. Contraceptive devices or contraceptive drugs shall not be provided by school personnel

or their agents. When a child seeks contraceptive devices or contraceptive drugs, the child shall be referred to the previously designated family practitioner.

Section 6. Participating schools and school districts may discontinue their participation as Medicaid providers at the direction of the local school district board of education.

Section 7. Nothing in sections 1 to 9 of this act shall prohibit schools or school districts from continuing health or medical services which were provided by such schools or school districts prior to the effective date of this section.

Section 8. When a school or school district enrolls as a Medicaid provider pursuant to section 3 of this act or receives a grant under section 2 of this act, the department of social services shall assure that the grants or funds are used to provide the most accessible care to school age children. No resident child shall be denied or discriminated against in school children health services or Medicaid services offered by a school district or a local health department under sections 1 to 9 of this act on the grounds that the child regularly attends or does not attend a public, private, parochial, parish or home school.

Section 9. 1. Persons providing health services under sections 1 to 9 of this act shall obtain authorization from a parent or guardian of the child before providing services as provided by section 431.061, RSMo.

2. No employee of any school district may be

required to administer medication or medical services for which the employee is not qualified according to standard medical practices. No employee who refuses to violate this provision shall be subject to any disciplinary action for such refusal. Nothing herein shall be construed to prevent any employee from providing routine first aid, provided that any employee shall be held harmless from any liability if such employee is following a proper procedure adopted by the local school board.

Section 10. Appropriations made to the department of health for medical services for children who were ineligible for Medicaid prior to the effective date of this section but become eligible because of changes made in section 208.151, RSMo, shall, if unused for their intended purposes, be retained by the department of health and upon subsequent appropriation be transferred to the department of social services for the purpose of funding Medicaid expansion.

Section 11. As used in sections 11 to 14 of this act, the following terms mean:

(1) "Certificate holder", a person who receives health care benefits or services pursuant to a policy, contract or plan;

(2) "Plan administrator":

(a) The person designated as the plan administrator by the instrument under which the contract or plan is operated; or

(b) If no plan administrator is designated, the plan sponsor;

(3) "Policy, contract or plan", a group insur-

Appendix B

Relevant Sections of
Senate Bill 380

Senate Bill 380
Section 166.260 (1) - (9)
Section 12

166.260. 1. There is hereby created [in the state treasury] the "Children At-Risk in Education [Fund] **Program**" which shall be administered by the commissioner of education. The [fund] **program** shall [consist of] **be funded by moneys provided to school districts pursuant to line 14 of subsection 6 of section 163.031, RSMo, and used solely as determined by local boards of education for: reductions of class size in schools containing high concentrations of children who are least advantaged or who have specially identified educational needs according to rule and regulation of the state board of education; or** [moneys appropriated annually by the general assembly from general revenue to such fund, and any moneys paid into the state treasury and required by law to be credited to such fund.

2. The moneys in the fund shall be available to fund only] the following [programs]:

(1) The program of half-day instruction for developmentally delayed and at-risk children established pursuant to section 167.260, RSMo;

(2) The program to provide teacher assistants in grades kindergarten through three established pursuant to section 167.263, RSMo;

(3) The program to provide guidance counselors in grades kindergarten through nine established pursuant to section

167.265, RSMo;

(4) The programs for pupils at risk of becoming high school dropouts established pursuant to section 167.270, RSMo, including specialized courses of instruction, alternative education programs for pregnant teens and teen mothers and supplemental services for teen mothers;

(5) The program of support services to pupils identified as having a high risk of dropping out of school established pursuant to section 167.280, RSMo; [and]

(6) The [grants to] **program of** professional development committees for in-service training on teaching children identified as at risk of failing in school pursuant to section 168.400, RSMo[.];

(7) A program to contract for mental health services to meet the needs of children who are identified as being at risk of failing school as a result of emotional or environmental factors. Eligible contractors shall be approved by the department of mental health;

(8) The program of special education and other special services for at-risk and handicapped children in grades kindergarten through third grade emphasizing prevention and early intervention, rather than remediation, known as the "Success for All Program"; and

(9) Other programs as approved by the commissioner of education that are exclusively targeted to provide educational services for students who are least advantaged or who have specially identified educational needs.

[3. The provisions of section 33.080, RSMo, to the contrary notwithstanding, moneys in the fund shall not be transferred and placed to the credit of general revenue. Interest earned on the fund shall be retained by the fund.]

167.031. 1. Every parent, guardian or other person in this state having charge, control or custody of a child not enrolled in a public, private, parochial, [or] parish school **or full-time**

equivalent attendance in a combination of such schools and between the ages of seven and sixteen years is responsible for enrolling the child in a program of academic instruction which complies with subsection 2 of this section. Any parent, guardian or other person who enrolls a child between the ages of five and seven years in a public school program of academic instruction shall cause such child to attend the academic program on a regular basis, according to this section. Nonattendance by such child shall cause such parent, guardian or other responsible person to be in violation of the provisions of section 167.061, except as provided by this section. A parent, guardian or other person in this state having charge, control, or custody of a child between the ages of seven and sixteen years of age shall cause the child to attend regularly some public, private, parochial, parish, [or] home school **or a combination of such schools** not less than the entire school term of the school which the child attends; except that

(1) A child who, to the satisfaction of the superintendent of public schools of the district in which he resides, or if there is no superintendent then the chief school officer, is determined to be mentally or physically incapacitated may be excused from attendance at school for the full time required, or any part thereof;

(2) A child between fourteen and sixteen years of age may be excused from attendance at school for the full time required, or any part thereof, by the superintendent of public schools of the district, or if there is none then by a court of competent jurisdiction, when legal employment has been obtained by the child and found to be desirable, and after the parents or guardian of the child have been advised of the pending action; or

(3) A child between five and seven years of age shall be excused from attendance at school if a parent, guardian or other person having charge, control or custody of the child makes a written request that the child be dropped from the school's rolls.

2. (1) As used in sections 167.031 to 167.071, a "home school" is a school, whether incorporated or unincorporated, that:

(a) Has as its primary purpose the provision of private or religious-based instruction;

(b) Enrolls pupils between the ages of seven and sixteen years, of which no more than four are unrelated by affinity or consanguinity to the third degree; and

(c) Does not charge or receive consideration in the form of tuition, fees, or other remuneration in a genuine and fair exchange for provision of instruction.

(2) As evidence that a child is receiving regular instruction, the parent shall:

(a) Maintain the following records:

a. A plan book, diary, or other written record indicating subjects taught and activities engaged in; and

b. A portfolio of samples of the child's academic work; and

c. A record of evaluations of the child's academic progress; or

d. Other written, or credible evidence equivalent to subparagraphs a., b. and c.; and

(b) Offer at least one thousand hours of instruction, at least six hundred hours of which will be in reading, language arts, mathematics, social studies and science or academic courses that are related to the aforementioned subject areas and consonant with the pupil's age and ability. At least four hundred of the six hundred hours shall occur at the regular home school location.

3. Nothing in this section shall require a private, parochial, parish or home school to include in its curriculum any concept, topic, or practice in conflict with the school's religious doctrines or to exclude from its curriculum any concept, topic, or practice consistent with the school's religious doctrines. Any other provision of the law to the contrary notwithstanding, all departments or agencies of the state of Missouri shall be

prohibited from dictating through rule, regulation or other device any statewide curriculum for private, parochial, parish or home schools.

4. A school year begins on the first day of July and ends on the thirtieth day of June following.

5. The production by a parent of a daily log showing that a home school has a course of instruction which satisfies the requirements of this section shall be a defense to any prosecution under this section and to any charge or action for educational neglect brought pursuant to chapter 210, RSMo.

167.131. 1. The board of education of each district in this state that does not maintain an [approved high school offering work through the twelfth grade] **accredited school pursuant to the authority of the state board of education to classify schools as established in section 161.092, RSMo,** shall pay the tuition of **and provide transportation consistent with the provisions of section 167.241, RSMo, for** each pupil resident therein [who has completed the work of the highest grade offered in the schools of the district and] who attends an [approved high] **accredited** school in another district of the same or an adjoining county[, or an approved high school maintained in connection with one of the state institutions of higher learning, where work of one or more higher grades is offered].

2. The rate of tuition to be charged by the district attended and paid by the sending district is the per pupil cost of maintaining the [high] **district's grade level grouping which includes the** school attended. The cost of maintaining **a grade level grouping** [the high school attended] shall be determined by the board of education of the district but in no case shall it exceed all amounts spent for teachers' wages, incidental purposes, debt service, maintenance and replacements. The term "debt service", as used in this section, means expenditures for the retirement of bonded indebtedness and expenditures for interest on bonded indebtedness. Per pupil cost of the **grade**

level grouping [school attended] shall be determined by dividing the cost of maintaining the [high school] **grade level grouping** by the average daily [high school] pupil attendance. If there is disagreement as to the amount of tuition to be paid, the facts shall be submitted to the state board of education, and its decision in the matter shall be final. Subject to the limitations of this section, each pupil shall be free to attend the **public** school of his or her choice[; but no school shall be required to admit any pupil].

167.241. Transportation for pupils whose tuition the district of residence is required to pay by section 167.131 or who are assigned as provided in section 167.121 shall be provided by the district of residence; however, in the case of pupils covered by section 167.131, the district of residence shall be required to provide transportation only to [high schools] **school districts accredited** [meeting minimum classification standards adopted] by the state board of education **pursuant to the authority of the state board of education to classify schools as established in section 161.092, RSMo,** and those [high schools] **school districts** designated by the board of education of the district of residence.

167.332. 1. The department of elementary and secondary education shall evaluate each alternative education plan and assess the needs of each area vocational learning center. Each area vocational learning center shall submit annually to the department of elementary and secondary education a detailed instruction plan for the implementation and continuation of the area learning center. For the purposes of receiving state aid **pursuant to section 163.031, RSMo,** the resident district shall count students who qualify under sections 167.320 to 167.332. A student shall be counted for the period of time he attends the area learning center to a maximum of six hours per day, even if the hours of attendance are not within the schedule of the resident district. All funds transmitted to the resident district under section 148.360, RSMo, 149.015, RSMo, and sections

163.031 and 163.087, RSMo, for the portion of time the student attends the area learning center, shall be transferred by the resident district to the area learning center. Additional state and federal funds appropriated by the general assembly shall be awarded to the area learning centers as determined by the department of elementary and secondary education based upon each area learning center's needs and on the level of the appropriation.

2. Updated instructional plans and year-end student reports shall be required annually from the area vocational learning centers and shall be a condition for additional funding. New area vocational learning centers shall be funded on a priority basis determined by the potential to be served and the community demand.

[168.415. 1. Beginning in school year 1986-87, all school district principals, instructional supervisors, classroom teachers and other certificated personnel are eligible every year for tuition reimbursement in an amount equal to the rate charged at Missouri public colleges and universities for successful completion of a credit course, and the attainment of a grade of A or B or their equivalents. There shall be no tuition reimbursement for any course in which a grade of less than B, or its equivalent, is attained. To qualify for tuition reimbursement under this subsection, the completed course shall be one consisting of no more than three credit hours, in the area of certification in which the eligible person is employed, so long as he works the succeeding year in that area of certification in a Missouri public school; except that any teacher regardless of area of certification shall be eligible for tuition reimbursement under this section for successful completion of a credit course of instruction on basic economics, for successful completion of no more than two courses of instruction for credit on the teaching or

counseling, or both, of children at risk as defined in section 167.273 or for successful completion of a course for the screening and treatment of auditory dyslexia including training in the Lindamood Auditory Discrimination In Depth Program and the Lindamood Auditory Conceptualization Test and attainment of a grade of A or B or their equivalents. The department of elementary and secondary education shall organize and administer the program of tuition reimbursement. The reimbursement shall be provided by the state from funds appropriated to the department of elementary and secondary education.

2. District personnel qualifying for the reimbursement provided by this section shall request such reimbursement from the state through their local school district.

3. Pursuant to the provisions of chapter 33, RSMo, the department of elementary and secondary education shall reimburse the local school district, which in turn shall reimburse each eligible person. Such reimbursement shall be made from funds appropriated by the general assembly for this purpose and deposited in the excellence in education fund established under section 160.268, RSMo.

4. In the event the amount appropriated for tuition reimbursement under this section does not meet the real and actual cost allowed under this section, the reimbursement to each eligible principal, instructional supervisor, classroom teacher or other certificated personnel shall be prorated equally.]

168.505. 1. Any teacher receiving career pay **pursuant to section 163.031, RSMo, for entitlements authorized** under any plan or program established under sections 168.500 to 168.515 shall continue to receive the district base pay to which he would be entitled if he were not receiving the career pay

provided for in sections 168.500 to 168.515.

2. Any teacher receiving career pay under any plan or program established under sections 168.500 to 168.515 shall receive any local pay to which teachers with similar training and experience are otherwise entitled.

168.515. 1. Each teacher selected to participate in a career plan established under sections 168.500 to 168.515, who meets the requirements of such plan, shall receive a salary supplement, the state's share of which shall be **distributed under section 163.031, RSMo, as** provided through the excellence in education fund established under section 160.268, RSMo, [as follows] **equal to the following amounts multiplied by the proration factor applied to the career ladder entitlement of line 15 of subsection 6 of section 163.031, RSMo:**

(1) Career stage I teachers may receive up to an additional one thousand five hundred dollars per school year;

(2) Career stage II teachers may receive up to an additional three thousand dollars per school year;

(3) Career stage III teachers may receive up to an additional five thousand dollars per school year.

2. The state shall make payments [directly] **pursuant to section 163.031, RSMo,** to the local school district for the purpose of reimbursing the local school district for the payment of any salary supplements provided for in this section subject to the availability of funds as appropriated each year and distributed on a variable match formula which shall include a bonus provision and shall be determined by **adding the equalized locally assessed valuation of each district to the assessed valuation of railroad and utility distributable property as determined by dividing the total assessed valuation of the distributable property within each county in which the district has territory by the total number of resident pupils enrolled in the public schools on the last Wednesday in September in each county in**

which the district has territory and multiplying the quotient thus obtained by the number of resident pupils enrolled in the public schools on the last Wednesday in September within that portion of each district lying wholly or partially within the county. A district's equalized assessed valuation **shall be** multiplied by the district income factor [established] **defined** in section [163.031] **163.011**, RSMo, and [which] shall be known as the adjusted equalized assessed valuation.

3. In distributing these matching funds, school districts shall be ranked by the adjusted equalized assessed valuation **for the second preceding school year per eligible pupil** from the lowest to the highest into groups, each of which shall contain one-twelfth of the public school districts. Pursuant to subsection 4, districts in the lowest group shall receive ninety percent state funding and shall contribute ten percent local funding. State and local funding portion shall decrease and increase respectively by incremental brackets of five percentage points pursuant to subsection 4. Districts in the highest group shall receive thirty-five percent state funding and shall contribute sixty-five percent local funding.

4. The incremental brackets of five percent are as follows:

State Funds	Local Funds
90%	10%
85%	15%
80%	20%
75%	25%
70%	30%
65%	35%
60%	40%
55%	45%
50%	50%
45%	55%
40%	60%
35%	65%

5. Any district in any bracket between the eighty-five percent state funding and fifteen percent local funding level and the thirty-five percent state funding and sixty-five percent local funding level shall be entitled to a bonus equal to five percent state funding under this section if such district has increased its levy after September 28, 1985, by no less than the amount necessary to pay the total local share of participation in the career plan.

6. Each school district shall inform the commissioner of education of the number of duly qualified teachers in the district who are entitled to a state-paid salary supplement under this section. The commissioner of education shall, in accordance with chapter 33, RSMo, execute payment to the districts.

7. Not less than every fourth year, beginning with calendar year 1988, the general assembly, through the joint committee established under section 160.254, RSMo, shall review the amount of the career pay provided for in this section to determine if any increases are necessary to reflect the increases in the cost of living which have occurred since the salary supplements were last reviewed or set.

8. To participate in the salary supplement program established under this section, a school district may submit to the voters of the district a proposition to increase taxes for this purpose. If a school district's current tax rate ceiling is at or above the rate from which an increase would require a two-thirds majority, the school board may submit to the voters of the district a proposition to reduce or eliminate the amount of the levy reduction resulting from section 164.013, RSMo. If a majority of the voters voting thereon vote in favor of the proposition, the board may certify that seventy-five percent of the revenue generated from this source shall be used to implement the salary supplement program established under this section.

9. In no case shall a local school district use as its matching funds to participate in this career program, any state aid

provided pursuant to section 160.264[,] **or** 163.031, [or 163.171,] RSMo.

177.051. If there is within any school district any school property that is not required for the use of the school district and the property could be used for purposes of offering education beyond grade twelve by a public institution of higher education, the school board may lease or convey the property to the public institution, and the proceeds derived from a conveyance shall be placed to the credit of the [building fund] **incidental fund** of the district.

177.061. 1. Any of the sixteenth-sections of land, or lands selected in lieu thereof, granted to the state of Missouri by acts of Congress for the support of schools in congressional townships may be sold and conveyed by the school district for whose benefit the land is held in the manner provided by law for the sale of property owned by the school district and no longer required for school purposes. The deed of conveyance shall be executed by the president of the school board of the district, signed by him and attested by the clerk or secretary of the board. If the district has a seal the seal shall be affixed to the deed.

2. Any conveyance of the land made by a school board in accordance with this section shall divest the state of Missouri of all title to the land, and vest title in the grantees, their heirs and assigns, forever.

3. The proceeds derived from the sale of the sixteenth-section school lands shall be placed to the credit of the [building fund] **incidental fund** of the district.

4. This section does not affect conveyances of sixteenth-section school lands made under prior laws.

177.073. 1. The board of directors or school board in urban school districts, metropolitan school districts, and school districts located totally or partially within a first class charter county adjoining a city not within a county, by an affirmative vote of not less than two-thirds of all the members, may:

(1) Select, direct and authorize the purchase of sites for and

authorize the construction of libraries, schools, school offices, art galleries and museums; and the necessary janitors' houses, repair buildings, supply houses and parking facilities to be used in the operation and maintenance of the schools;

(2) Authorize and direct the purchase of additional ground needed for school purposes;

(3) Authorize and direct the sale and transfer or lease of any real or personal property belonging to the district which is not required for operation of the school program. Real property may be sold or leased by listing the property with one or more real estate brokers licensed by the state of Missouri and paying a commission upon such sale or lease. Real property not sold or leased through a real estate broker and all personal property shall be sold or leased to the highest bidder, except that any real or personal school property may be sold or leased to a community group or a city, state agency, municipal corporation, or any other governmental subdivision of the state located wholly or partially within the boundaries of the district, for public uses and purposes, at such sum as may be agreed upon between the school district and the community group or the city, state agency, municipal corporation, or other governmental subdivision of the state. If property is to be leased by bid, written proposals for lease terms shall be submitted by potential lessees. The lease proposal offering the most economically advantageous terms shall be considered the highest lease bid. A purchase proposal may include contingencies; the proposal offering the most economically advantageous terms shall be the highest bid. All bids for purchase or lease of real property shall be submitted formally as closed bids. Bids shall be opened at a meeting, which shall be an open meeting. The board may reject all bids, or negotiate an acceptable sale or lease with the highest bidder, if all bids are unsatisfactory. The records of the bid opening meeting shall be an open record. If real property is not sold or leased through a real estate broker, notice that the board is holding real property for sale or offering it for lease, including

a planned sale or lease to a community group or a city, state agency, municipal corporation, or other governmental subdivision of the state, shall be given by publication in a newspaper within the county in which all or a part of the district is located which has general circulation within the district, once a week for two consecutive weeks, the last publication to be at least seven days and not more than fourteen days prior to the date of the bid opening. The term of a lease may be for any period which the board finds is advantageous and meets the needs of the district. The lease or deed of conveyance shall be executed by the president and attested by the secretary of the board. If the district has a seal, it shall be affixed to the deed or lease. The proceeds derived from sale of real property shall be placed to the credit of the [building fund] **incidental fund** of the district. The proceeds from sale of nonrealty and from leases shall be placed to the credit of the incidental fund.

2. The board may receive, in behalf of the school district, any grants, gifts, or devises made for the benefit of the district or its schools, or any public library, art gallery or museum under the control of the board.

177.091. 1. The school board in each six-director district, as soon as sufficient funds are provided, shall establish an adequate number of elementary schools, and if the demands of the district require more than one elementary school building, the board shall divide the district into elementary school wards and fix the boundaries thereof. The board shall select and procure a site in each ward and erect and furnish a suitable school building thereon.

2. The board may also establish high schools and may select and procure sites and erect and furnish buildings therefor.

3. The board may acquire additional grounds when needed for school purposes.

4. If there is within the district any school property that is no longer required for the use of the district, the board, by an affirmative vote of a majority of the whole board, may

authorize and direct the sale or lease of the property. Real property may be sold or leased by listing the property with one or more real estate brokers licensed by the state of Missouri and paying a commission upon such sale or lease. Real property not sold or leased through a real estate broker and all personal property, unless sold or leased to a public institution of higher education, shall be sold or leased to the highest bidder. If real property is not sold or leased through a real estate broker, notice that the board is holding the property for sale or offering it for lease shall be given by publication in a newspaper within the county in which all or a part of the district is located which has general circulation within the district, once a week for two consecutive weeks, the last publication to be at least seven days prior to the sale or lease of the property; except that, any real or personal school property may be sold or leased to a city, state agency, municipal corporation, or other governmental subdivision of the state located within the boundaries of the district, for public uses and purposes, by the giving of public notice as herein provided and at such sum as may be agreed upon between the school district and the city, state agency, municipal corporation, or other governmental subdivision of the state. The lease or deed of conveyance shall be executed by the president and attested by the secretary of the board. If the district has a seal, it shall be affixed to the deed or lease. The proceeds derived from the sale of real property shall be placed to the credit of the [building fund] **incidental fund** of the district. The proceeds from the sale of nonrealty and from leases shall be placed to the credit of the incidental fund.

5. The school board of a six-director district may also list real property for sale on which a building has been constructed by an approved vocational education class with a real estate broker licensed by the state of Missouri and pay a commission thereon.

6. Other provisions of this section to the contrary notwithstanding, bids for the purchase of any building

constructed by students as part of an approved vocational education class may be accepted prior to completion of such construction.

178.693. 1. School districts that offer an approved program of parent education shall be eligible for state reimbursement, **pursuant to section 163.031, RSMo,** subject to appropriations therefor for each participating family. If a school district fails or is unable to offer an approved program of parent education, the district shall enter into a contract which meets the requirements under section 178.697, with another district, public agency or state approved not for profit agency offering an approved program for such services. If the district finds that no approved program is available in another district, public agency, or through a state approved not for profit agency it shall request the state department of elementary and secondary education to assist it in obtaining from an approved program, services at the reimbursable rate.

2. School districts that offer an approved program of developmental screening for all children under the age of five years shall be eligible for state reimbursement, **pursuant to section 163.031, RSMo,** subject to appropriations therefor for each participating child. If a school district fails or is unable to offer an approved program of developmental screening the district shall enter into a contract which meets the requirements under section 178.697, with another district, public agency or state approved not for profit agency offering an approved program for such services. If the district finds that no approved program is available in another district, public agency or state approved not for profit agency it shall request the state department of elementary and secondary education to assist it in obtaining from an approved program, services at the reimbursable rate.

3. School districts that offer approved programs for developmentally delayed children ages three and four who may also be eligible for programs under the provisions of sections

162.670 to 162.995, RSMo, shall be eligible for state reimbursement, **pursuant to section 163.031, RSMo,** subject to appropriations, provided the children are not receiving the same or similar services for handicapped or severely handicapped children under another program for which reimbursements from the department of elementary and secondary education are available to the district. If a school district fails or is unable to offer an approved program for developmentally delayed children ages three and four, the district shall enter into a contract which meets the requirements under section 178.697 with another district, public agency or state approved not for profit agency offering an approved program for such services. If the district finds that no approved program is available in another district, public agency or state approved not for profit agency, it shall request the state department of elementary and secondary education to assist it in obtaining from an approved program, services at the reimbursable rate.

178.697. 1. Funding for sections 178.691 to 178.699 shall be **made available pursuant to section 163.031, RSMo, and shall be** subject to appropriations made for this purpose.

2. Costs of contractual arrangements shall be the obligation of the school district of residence of each preschool child. Costs of contractual arrangements shall not exceed an amount equal to an amount reimbursable to the school districts under the provisions of sections 178.691 to 178.699. No program shall be approved or contract entered into which requires any additional payment by participants or their parents or guardians.

3. Payments for participants for programs outlined in section 178.693 shall be uniform for all districts or public agencies.

Section 11. 1. From moneys appropriated for this purpose from the fund established by section 1 of this act, by rule and regulation, the state board of education shall make grants to school districts for the acquisition of

computers, data transmission lines, networking hardware and software, science and mathematics laboratory equipment, and such other equipment to promote the use of computers and telecommunications technology. In determining the criteria and procedures for grants authorized by this section, the state board of education shall consider the advice and counsel provided by the advisory committee established pursuant to subsection 4 of section 170.250, RSMo.

2. In no case shall the grants authorized by this section exceed five million dollars in any fiscal year.

Section 12. 1. As used in this section, the following words and phrases shall mean:

(1) "Capital improvement projects", expenditures for lands or existing buildings, improvements of grounds, construction of buildings, additions to buildings, remodeling of buildings and initial equipment purchases;

(2) "School facility", a structure dedicated primarily to housing teachers and students in the instructional process, but shall not include buildings dedicated primarily to administrative and support functions within the school.

2. There is hereby created a revolving fund to be known as the "School Building Revolving Fund". For all years, no more than four hundred forty million dollars shall be transferred under section 8 of this act from the gaming proceeds for education fund into the School Building Revolving Fund. After a fund balance has been established by prior years deposits and interest, school districts may submit requests for loans from the revolving fund for specific projects consistent with rules and regulations of the state board of education and subsection 4 of this section, except that no school district may be permitted to receive a loan from the school building revolving fund without first submitting a long-

range capital improvements plan.

4. To be eligible for loans authorized by this section:

(1) A school district shall meet the minimum criteria for state aid and for increases in state aid established pursuant to section 163.021, RSMo;

(2) A school district shall provide a program which is accredited by the state board of education for grades kindergarten through twelve; and

(3) A school district shall not incur a total debt, including short-term debt and bonded indebtedness in excess of ten percent of the guaranteed tax base for the current payment year multiplied by the number of eligible pupils in the district in the preceding year.

5. If the balance in the school building revolving fund is insufficient to fund project plans for capital improvements, applications shall be funded based upon a priority ranking. Ranking of the projects shall be based upon the following variables:

(1) A rating of provisionally accredited or unaccredited as determined by the state board of education pursuant to section 161.092, RSMo, based upon the condition and adequacy of facilities pursuant to section 9 of this act;

(2) Equalized assessed valuation per eligible pupil;

(3) Increasing enrollment;

(4) Age or condition of facility; and

(5) Building destruction due to fire or natural disaster.

6. The state board of education shall promulgate, by rule, the methodology for prioritizing projects based upon these variables.

Section 13. 1. Board members initially elected or appointed under section 162.291, 162.459, 162.471, or 162.581, RSMo, after the effective date of this section, in addition to the qualifications prescribed in those

Appendix C

Spreadsheets
&
Individually Sorted Health Status
Indicators

Explanation for the Spreadsheets

The spreadsheet prepared by the State Center for Health Statistics displays the health status indicators and the risk ratio for each indicator relative to the average for the state of Missouri. Section 1 presents a ranked listing of the counties from the greatest to the least in need based on the relative values of the risk ratios. Section 2 lists the counties in alphabetical order. Section 3 provides information about each health status indicator. In this section the counties are sorted from worst to best for each indicator.

The ranking of the information in section 1 was carried out to determine the priority-need for School Children's Health Services in each county relative to each other. Risk ratios were prepared for each county on each health status indicator. A risk ratio is a ratio of a rate for a given health status indicator for a given county to the corresponding rate for the state. A risk ratio of one implies that the county's rate and the rate for the state for a given indicator are identical. If the ratio is greater/less than one it implies that the county's rate is higher/lower that the corresponding rate for the state. As an example, a risk ratio of 2.0 for unemployment implies that the county's unemployment rate is twice as high as the unemployment rate of the state.

To determine statistically which counties might present the greater need, the sum of the five risk ratios for each county was added to a constant. Using this formula, the index for Missouri is 100. Counties whose indexes are greater than 100, for example, Carter County with an index of 104.12 presents needs which are greater than the average for the state, and St. Louis County with an index of 97.96 present needs which are less than the average for the state. In other words, using this formula and these indicators, Carter County would have a greater need for School Children's Health Services than St. Louis County because the risk ratios indicate that the barriers to care in Carter County are greater than in St. Louis County.

In section 3 each indicator was sorted from highest risk ratio to the lowest. The county with the highest ratio or the county at the top of each list indicates the worst rate, relative to the other counties, for that particular indicator.

Section 1

Alphabetized Spreadsheet

COUNTY NAME	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	CHILD ABUSE/ NEGLECT VICTIMS	POPU-LATION UNDER 18	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO UNEM-PLOYMENT	RISK RATIO DEATH AGES 5-17	RISK RATIO MOMS' EDUC. <12 YRS	RISK RATIO CHILD ABUSE	RISK RATIO POVERTY	INDEX3
STATEWIDE	154020.0	2645614.8	3654	935425.0	83787	387461	81856	1248776	326757	933264	1.0000	1.0000	1.0000	1.0000	1.0000	100.000000
ADAIR	451.4	11672.8	8	3524.0	212	1416	440	4697	1465	3512	0.6643	0.5812	0.6923	1.4291	1.1914	99.558288
ANDREW	434.8	7218.6	15	2907.5	135	917	131	3753	984	2965	1.0346	1.3207	0.6808	0.5325	0.9479	99.516532
ATCHISON	132.8	3211.4	3	1317.0	55	390	27	1586	532	1274	0.7103	0.5831	0.6522	0.2597	1.1927	98.398003
AUDRAIN	606.2	10626.6	17	4729.5	378	1506	334	5902	2049	4658	0.9799	0.9202	1.1607	0.8633	1.2564	100.180476
BARRY	684.6	13607.4	9	4956.0	504	1904	257	6595	2495	5107	0.8642	0.4649	1.2241	0.5945	1.3954	99.543034
BARTON	215.8	5668.6	9	2157.0	159	743	163	2852	958	2186	0.6539	1.0682	0.9896	0.8719	1.2517	99.835268
BATES	530.8	6301.4	16	2882.5	215	976	281	3735	1233	2911	1.4469	1.4210	1.0187	1.1478	1.2098	101.244112
BENTON	484.0	5672.8	6	2214.5	173	650	237	2784	1138	2214	1.4655	0.6936	1.2308	1.2987	1.4681	101.156715
BOLLINGER	408.2	4098.0	9	2014.0	180	734	161	2637	937	2007	1.7110	1.1440	1.1340	0.9314	1.3334	101.253898
BOONE	2001.0	69693.6	66	16818.0	1245	8531	1185	24290	4902	17305	0.4932	1.0046	0.6749	0.7443	0.8091	98.726009
BUCHANAN	2702.0	42912.0	51	15507.5	1524	6210	1891	20398	6273	15455	1.0816	0.8419	1.1349	1.4143	1.1593	100.631918
BUTLER	1380.4	17368.4	29	7422.0	1007	2587	733	9412	4218	7356	1.3652	1.0003	1.8000	1.1881	1.6377	101.991361
CALDWELL	244.6	3235.6	10	1583.0	123	543	138	2080	751	1577	1.2985	1.6172	1.0475	1.0122	1.3602	101.335533
CALLAWAY	845.2	16402.0	22	6110.0	482	2295	530	8159	1958	6150	0.8851	0.9218	0.9712	0.9910	0.9093	99.678444
CAMDEN	1037.8	15557.8	23	4187.5	345	1649	378	5699	1905	4344	1.1458	1.4061	0.9675	1.0119	1.2525	100.783801
CAPE GIRARDEAU	1567.8	35864.8	29	10281.5	683	4279	675	13882	3358	10476	0.7509	0.7221	0.7381	0.7418	0.9155	98.868393
CARROLL	397.8	4277.0	6	2150.5	191	729	173	2651	999	2132	1.5976	0.7143	1.2116	0.9956	1.3383	100.857354
CARTER	223.6	2096.0	14	1128.0	146	400	62	1441	716	1155	1.8324	3.1773	1.6879	0.6564	1.7706	104.124589
CASS	1935.8	33231.0	48	12729.5	813	4708	847	17601	3646	13173	1.0006	0.9653	0.7986	0.7341	0.7905	99.289148
CEDAR	320.2	4704.4	12	2064.5	167	706	142	2655	1121	2075	1.1691	1.4880	1.0939	0.8159	1.5430	101.109960
CHARITON	265.0	4318.0	8	1776.5	70	508	59	2269	742	1748	1.0542	1.1528	0.6372	0.3967	1.2124	99.453299
CHRISTIAN	889.4	17406.6	31	6209.5	363	2470	802	8857	2271	6869	0.8777	1.2780	0.6796	1.3814	0.9443	100.161021
CLARK	227.0	3894.8	4	1592.0	101	406	89	1957	777	1518	1.0011	0.6432	1.1504	0.6938	1.4619	99.950476
CLAY	3966.8	87243.4	94	27350.0	1568	11264	1160	37522	5290	27701	0.7810	0.8799	0.6437	0.4716	0.5454	98.321663
CLINTON	490.4	7504.8	20	3385.0	202	1056	237	4361	1152	3394	1.1224	1.5126	0.8846	0.8291	0.9694	100.318093
COLE	1445.4	35675.2	46	11418.5	649	4540	559	15091	2496	11489	0.6959	1.0313	0.6611	0.5651	0.6205	98.573911
COOPER	382.2	6911.2	19	2702.0	212	965	159	3422	900	2589	0.9499	1.8001	1.0159	0.7088	0.9929	100.467700
CRAWFORD	841.4	10224.0	19	3746.5	465	1386	200	4885	1801	3801	1.4136	1.2983	1.5515	0.6246	1.3533	101.241257
DADE	172.8	3077.4	8	1320.5	80	472	167	1787	571	1325	0.9645	1.5509	0.7838	1.4257	1.2308	100.955762
DALLAS	428.8	4087.4	19	2412.0	294	882	105	3213	1431	2482	1.8020	2.0166	1.5415	0.4986	1.6467	102.505314
DAVIESS	233.4	3733.2	10	1575.0	204	566	128	2003	890	1571	1.0739	1.6254	1.6667	0.9749	1.6181	101.959003
DE KALB	234.6	4020.8	7	1532.0	69	523	70	2021	600	1538	1.0022	1.1697	0.6101	0.5284	1.1142	99.424668
DENT	475.8	6268.6	13	2736.0	255	841	229	3409	1613	2708	1.3038	1.2164	1.4022	1.0248	1.7012	101.648353
DOUGLAS	379.0	4804.6	20	2324.0	236	778	240	3009	1365	2338	1.3550	2.2031	1.4028	1.2168	1.6675	102.845156

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DUNKLIN	1145.0	13722.6	36	6681.0	1054	2437	1386	8236	3757	6504	1.4332	1.3794	2.0000	2.5673	1.6498	104.029864
FRANKLIN	3452.4	41483.4	87	16475.0	1498	6385	943	21865	5096	16730	1.4295	1.3519	1.0849	0.6580	0.8700	100.394282
GASCONADE	523.4	7480.6	12	2459.0	203	927	271	3315	903	2553	1.2018	1.2493	1.0127	1.2472	1.0102	100.721174
GENTRY	127.6	2753.4	2	1266.5	66	413	81	1591	627	1204	0.7960	0.4043	0.7390	0.7767	1.4874	99.203366
GREENE	5037.8	113123.8	129	33425.0	2494	14141	3017	45148	11262	34054	0.7650	0.9880	0.8156	1.0195	0.9446	99.532558
GRUNDY	300.2	5051.0	12	1891.5	128	610	109	2355	873	1838	1.0209	1.6241	0.9704	0.7061	1.3566	100.678060
HARRISON	199.6	4347.2	7	1484.5	65	456	163	1817	786	1425	0.7887	1.2071	0.6592	1.3686	1.5754	100.598951
HENRY	716.0	8676.6	16	3570.5	318	1230	459	4641	1822	3637	1.4175	1.1472	1.1956	1.5088	1.4308	101.699843
HICKORY	211.2	2835.8	7	1056.0	82	339	104	1333	663	1072	1.2793	1.6970	1.1186	1.1902	1.7664	102.051519
HOLT	140.8	2308.4	6	1151.5	61	344	104	1441	593	1147	1.0477	1.3339	0.8200	1.1010	1.4766	100.779309
HOWARD	206.2	4548.8	9	1770.5	111	601	174	2258	758	1767	0.7786	1.3013	0.8541	1.1756	1.2252	100.334874
HOWELL	972.2	14526.4	17	5944.0	614	2190	419	7814	3640	6055	1.1496	0.7322	1.2965	0.8180	1.7170	100.713304
IRON	407.2	2751.2	13	2168.5	215	684	155	2685	1041	2086	2.5423	1.5347	1.4536	0.8807	1.4253	102.836633
JACKSON	20129.8	341021.2	450	112433.0	12811	53592	11342	153181	38161	110636	1.0139	1.0246	1.1054	1.1296	0.9852	100.258714
JASPER	2525.2	49552.0	56	16564.0	1817	6690	1832	21932	6831	16704	0.8757	0.8655	1.2560	1.2743	1.1680	100.439503
JEFFERSON	6360.4	90371.0	145	35156.5	2628	13766	3132	48557	8666	36081	1.2089	1.0559	0.8828	0.9840	0.6860	99.817618
JOHNSON	890.4	20689.2	20	6763.0	395	3292	449	9918	2708	7024	0.7392	0.7571	0.5549	0.6906	1.1011	98.842968
KNOX	113.0	1805.2	2	845.5	73	245	110	997	473	797	1.0752	0.6056	1.3779	1.6852	1.6950	101.436896
LACLEDE	1197.6	13515.6	26	5218.0	572	2046	401	6939	2648	5286	1.5220	1.2756	1.2928	0.8816	1.4308	101.402849
LAFAYETTE	956.2	15287.8	24	5883.0	407	2053	373	7805	2180	5925	1.0744	1.0444	0.9168	0.7291	1.0509	99.815435
LAWRENCE	836.2	14266.6	34	5859.0	544	2139	567	7637	2515	5873	1.0068	1.4856	1.1761	1.1326	1.2231	101.024191
LEWIS	292.2	4908.6	9	1836.0	94	535	226	2270	792	1776	1.0225	1.2549	0.8125	1.5189	1.2737	100.882468
LINCOLN	1049.8	13886.0	31	5749.0	475	2320	421	8275	2030	6084	1.2986	1.3804	0.9468	0.7762	0.9530	100.354963
LINN	518.8	6627.6	15	2551.0	194	940	64	3261	1162	2603	1.3446	1.5053	0.9544	0.2994	1.2750	100.378694
LIVINGSTON	330.6	6654.2	7	2728.5	206	988	203	3489	1076	2736	0.8534	0.6568	0.9642	0.8876	1.1232	99.485240
MCDONALD	467.4	9865.8	18	3260.0	476	1302	444	4451	1819	3329	0.8138	1.4135	1.6906	1.5218	1.5606	102.000333
MACON	539.0	8451.8	11	2936.5	180	862	155	3560	1178	2898	1.0954	0.9590	0.9656	0.6642	1.1610	99.845260
MADISON	475.2	4617.4	9	2076.0	226	727	381	2698	1039	2060	1.7678	1.1098	1.4376	2.1544	1.4405	102.910069
MARIES	309.6	3979.6	8	1528.5	104	463	97	1946	731	1502	1.3363	1.3399	1.0387	0.7604	1.3900	100.865407
MARION	788.6	14104.0	34	5498.5	458	1950	455	7152	2435	5501	0.9604	1.5830	1.0861	0.9706	1.2643	100.864348
MERCER	93.6	1437.6	4	657.5	30	173	64	794	284	652	1.1184	1.5574	0.8019	1.2297	1.2441	100.951472
MILLER	952.0	9000.8	18	4195.5	456	1530	384	5500	2001	4112	1.8168	1.0983	1.3782	1.0651	1.3899	101.748351
MISSISSIPPI	633.2	6901.0	15	3159.0	407	1091	293	3957	1977	3122	1.5761	1.2156	1.7251	1.1296	1.8086	102.455057
MONITEAU	412.2	6504.8	12	2546.0	225	817	126	3210	1094	2510	1.0885	1.2066	1.2735	0.5988	1.2449	100.412318
MONROE	251.4	4781.4	5	1839.0	86	537	78	2393	864	1854	0.9031	0.6960	0.7406	0.4973	1.3310	99.168047

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MONTGOMERY	359.4	5062.6	7	2179.5	205	761	295	2824	927	2209	1.2194	0.8222	1.2457	1.5936	1.1986	101.079565
MORGAN	546.0	7700.8	16	2597.0	377	1017	209	3416	1289	2549	1.2179	1.5772	1.7142	0.9334	1.4443	101.887038
NEW MADRID	814.8	9944.6	25	4706.5	590	1589	709	5793	2608	4575	1.4074	1.3598	1.7170	1.8671	1.6282	102.979541
NEWTON	1483.2	24201.0	38	8446.0	829	3115	954	11117	3512	8529	1.0527	1.1518	1.2307	1.3092	1.1761	100.920448
NODAWAY	353.0	11056.4	10	3510.0	109	1157	165	4654	1571	5581	0.5484	0.7293	0.4357	0.5409	1.2530	98.507288
OREGON	271.2	3634.6	14	1771.0	171	560	169	2098	1049	1722	1.2817	2.0237	1.4121	1.2289	1.7399	102.686274
OSAGE	319.0	6551.2	15	2531.0	89	795	68	3145	657	2511	0.8364	1.5172	0.5177	0.3299	0.7473	98.948454
OZARK	251.6	3586.8	9	1534.5	107	424	133	1863	875	1561	1.2049	1.5015	1.1670	1.0891	1.6010	101.563458
PEMISCOT	770.2	8982.4	18	4993.0	951	2023	1036	6386	3385	4893	1.4729	0.9229	2.1739	2.4749	1.9759	104.020465
PERRY	519.2	9617.2	10	3425.5	197	1063	77	4425	1131	3420	0.9273	0.7473	0.8570	0.2655	0.9445	98.741675
PETTIS	1266.2	18727.0	28	6625.5	585	2552	525	8753	2697	6595	1.1614	1.0819	1.0601	0.9150	1.1680	100.386377
PHELPS	882.8	17102.4	27	6034.5	486	2280	704	7943	2560	6008	0.8867	1.1454	0.9857	1.3521	1.2170	100.586927
PIKE	561.4	7741.6	20	3255.5	318	1148	429	4118	1657	3175	1.2456	1.5727	1.2810	1.5893	1.4906	102.179211
PLATTE	1389.6	33334.2	29	10405.5	533	4273	727	14440	1925	10911	0.7161	0.7135	0.5768	0.7681	0.5039	98.278329
POLK	572.2	11157.2	18	3764.0	294	1464	275	5056	1840	3894	0.8809	1.2242	0.9287	0.8298	1.3496	100.213187
PULASKI	881.0	12992.0	28	8371.0	586	3797	811	11388	4533	7938	1.1648	0.8563	0.7137	1.0864	1.6310	100.452218
PUTNAM	105.6	2140.0	4	910.5	56	274	66	1074	466	863	0.8476	1.1247	0.9451	0.9375	1.5422	100.397154
RALLS	237.6	4369.6	6	1719.5	76	487	42	2128	731	1710	0.9340	0.8933	0.7217	0.3011	1.2210	99.071024
RANDOLPH	710.6	11017.4	9	4545.5	456	1659	566	5796	1810	4551	1.1079	0.5069	1.2711	1.4898	1.1359	100.511543
RAY	722.8	10371.4	25	4574.5	338	1520	436	5931	1559	4633	1.1971	1.3991	1.0283	1.1215	0.9611	100.707043
REYNOLDS	212.8	2186.6	4	1363.5	123	397	118	1660	738	1292	1.6717	0.7510	1.4327	1.0844	1.6314	101.571314
RIPLEY	359.2	4328.0	9	2416.5	363	854	235	3093	1679	2428	1.4256	0.9534	1.9656	1.1591	1.9751	102.478840
ST CHARLES	5829.0	119225.6	106	41211.5	2053	18782	2267	61214	6779	44486	0.8398	0.6585	0.5055	0.5650	0.4352	98.003943
ST CLAIR	284.8	3675.8	7	1491.5	155	501	143	1852	650	1409	1.3309	1.2015	1.4307	1.1780	1.3176	101.458593
ST FRANCOIS	1952.0	22303.6	31	8930.5	985	3287	1232	11767	4001	9077	1.5033	0.8886	1.3858	1.5973	1.2589	101.633945
ST LOUIS COUNTY	24083.2	556844.6	455	176580.5	8157	71992	8589	231979	28680	172970	0.7429	0.6596	0.5240	0.5648	0.4736	97.964919
STE GENEVIEVE	468.8	6605.4	9	3263.0	184	1063	165	4268	1096	3263	1.2191	0.7061	0.8005	0.5898	0.9593	99.274775
SALINE	732.6	11022.8	22	4386.5	443	1534	474	5578	1745	4236	1.1416	1.2839	1.3355	1.2964	1.1766	101.233983
SCHUYLER	110.6	1952.6	5	791.5	46	278	114	981	414	745	0.9730	1.6172	0.7652	1.7728	1.5872	101.715330
SCOTLAND	104.8	2151.2	13	902.5	103	317	64	1156	500	869	0.8368	3.6875	1.5026	0.8446	1.6433	103.514865
SCOTT	1407.2	18716.8	30	8187.0	900	3128	647	10576	3497	8124	1.2914	0.9381	1.3305	0.9333	1.2294	100.722774
SHANNON	336.2	3277.6	7	1494.0	176	579	186	1921	867	1450	1.7619	1.1995	1.4057	1.4771	1.7078	102.551991
SHELBY	141.6	3542.0	5	1323.5	67	462	49	1706	652	1297	0.6867	0.9671	0.6706	0.4382	1.4358	99.198417
STODDARD	1112.0	13579.0	20	5471.0	613	1787	225	6744	2715	5544	1.4067	0.9358	1.5863	0.5090	1.3987	100.836486
STONE	936.8	8856.4	15	2970.0	284	1133	279	3836	1459	3023	1.8169	1.2929	1.1592	1.1096	1.3785	101.757066

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COUNTY NAME	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	CHILD ABUSE/ NEGLECT VICTIMS	POPU-LATION UNDER 18	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO UNEM-PLOYMENT	RISK RATIO DEATH AGES 5-17	RISK RATIO MOMS' EDUC. <12 YRS	RISK RATIO CHILD ABUSE	RISK RATIO POVERTY	INDEX3
SULLIVAN	144.0	3432.2	2	1082.5	89	367	53	1309	542	1021	0.7207	0.4730	1.1214	0.6177	1.5162	99.448971
TANEY	1475.2	17636.0	16	3777.0	324	1518	602	5003	1644	3878	1.4368	1.0845	0.9870	1.8357	1.2108	101.554786
TEXAS	840.2	9101.4	18	4252.5	402	1313	246	5492	2613	4272	1.5857	1.0836	1.4158	0.6833	1.7470	101.515467
VERNON	450.4	8982.2	23	3620.5	335	1267	498	4724	1782	3619	0.8613	1.6263	1.2227	1.6082	1.4064	101.724934
WARREN	748.8	10063.8	17	3640.5	342	1600	329	5250	1316	3954	1.2781	1.1954	0.9885	0.9560	0.9506	100.368594
WASHINGTON	1057.6	6700.4	23	4417.0	620	1512	507	5734	2558	4459	2.7113	1.3330	1.8962	1.3489	1.6385	103.927918
WAYNE	531.4	5163.6	12	2017.0	317	766	89	2578	1264	2040	1.7677	1.5231	1.9137	0.5267	1.7697	102.500891
WEBSTER	864.8	10436.4	31	4816.0	519	1773	290	6470	2350	4912	1.4234	1.6478	1.3537	0.6838	1.3664	101.475096
WORTH	61.4	1162.6	2	457.5	17	136	48	563	223	408	0.9072	1.1191	0.5780	1.3007	1.5611	100.466085
WRIGHT	588.8	7140.4	21	3408.5	370	1176	826	4470	2111	3516	1.4164	1.5772	1.4549	2.8191	1.7148	103.982502
ST LOUIS CITY	15569.6	183828.8	369	71863.0	15169	40636	13214	95468	40078	66904	1.4548	1.3145	1.7262	2.1116	1.7109	103.318091

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UNEPLOYMENT DATA - DIVISION OF EMPLOYMENT SECURITY - AVERAGE MONTHLY NUMBER OF UNEMPLOYED WORKERS: 1988-92
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Section 2

Ranked Spreadsheet

COUNTY NAME	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	CHILD ABUSE/ NEGLECT VICTIMS	POPU-LATION UNDER 18	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO UNEM-PLOYMENT	RISK RATIO DEATH AGES 5-17	RISK RATIO MOMS' EDUC. <12 YRS	RISK RATIO CHILD ABUSE	RISK RATIO POVERTY	INDEX3
CARTER	223.6	2096.0	14	1128.0	146	400	62	1441	716	1155	1.8324	3.1773	1.6879	0.6564	1.7706	104.124589
DUNKLIN	1145.0	13722.6	36	6681.0	1054	2437	1386	8236	3757	6504	1.4332	1.3794	2.0000	2.5673	1.6498	104.029864
PEMISCOT	770.2	8982.4	18	4993.0	951	2023	1036	6386	3385	4893	1.4729	0.9229	2.1739	2.4749	1.9759	104.020465
WRIGHT	588.8	7140.4	21	3408.5	370	1176	826	4470	2111	3516	1.4164	1.5772	1.4549	2.8191	1.7148	103.982502
WASHINGTON	1057.6	6700.4	23	4417.0	620	1512	507	5734	2558	4459	2.7113	1.3330	1.8962	1.3489	1.6385	103.927918
SCOTLAND	104.8	2151.2	13	902.5	103	317	64	1156	500	869	0.8368	3.6875	1.5026	0.8446	1.6433	103.514865
ST LOUIS CITY	15569.6	183828.8	369	71863.0	15169	40636	13214	95468	40078	66904	1.4548	1.3145	1.7262	2.1116	1.7109	103.318091
NEW MADRID	814.8	9944.6	25	4706.5	590	1589	709	5793	2608	4575	1.4074	1.3598	1.7170	1.8671	1.6282	102.979541
MADISON	475.2	4617.4	9	2076.0	226	727	381	2698	1039	2060	1.7678	1.1098	1.4376	2.1544	1.4405	102.910069
DOUGLAS	379.0	4804.6	20	2324.0	236	778	240	3009	1365	2338	1.3550	2.2031	1.4028	1.2168	1.6675	102.845156
IRON	407.2	2751.2	13	2168.5	215	684	155	2685	1041	2086	2.5423	1.5347	1.4536	0.8807	1.4253	102.836633
OREGON	271.2	3634.6	14	1771.0	171	560	169	2098	1049	1722	1.2817	2.0237	1.4121	1.2289	1.7399	102.686274
SHANNON	336.2	3277.6	7	1494.0	176	579	186	1921	867	1450	1.7619	1.1995	1.4057	1.4771	1.7078	102.551991
DALLAS	428.8	4087.4	19	2412.0	294	882	105	3213	1431	2482	1.8020	2.0166	1.5415	0.4986	1.6467	102.505314
WAYNE	531.4	5163.6	12	2017.0	317	766	89	2578	1264	2040	1.7677	1.5231	1.9137	0.5267	1.7697	102.500891
RIPLEY	359.2	4328.0	9	2416.5	363	854	235	3093	1679	2428	1.4256	0.9534	1.9656	1.1591	1.9751	102.478840
MISSISSIPPI	633.2	6901.0	15	3159.0	407	1091	293	3957	1977	3122	1.5761	1.2156	1.7251	1.1296	1.8086	102.455057
PIKE	561.4	7741.6	20	3255.5	318	1148	429	4118	1657	3175	1.2456	1.5727	1.2810	1.5893	1.4906	102.179211
HICKORY	211.2	2835.8	7	1056.0	82	339	104	1333	663	1072	1.2793	1.6970	1.1186	1.1902	1.7664	102.051519
MCDONALD	467.4	9865.8	18	3260.0	476	1302	444	4451	1819	3329	0.8138	1.4135	1.6906	1.5218	1.5606	102.000333
BUTLER	1380.4	17368.4	29	7422.0	1007	2587	733	9412	4218	7356	1.3652	1.0003	1.8000	1.1881	1.6377	101.991361
DAVIESS	233.4	3733.2	10	1575.0	204	566	128	2003	890	1571	1.0739	1.6254	1.6667	0.9749	1.6181	101.959003
MORGAN	546.0	7700.8	16	2597.0	377	1017	209	3416	1289	2549	1.2179	1.5772	1.7142	0.9334	1.4443	101.887038
STONE	936.8	8856.4	15	2970.0	284	1133	279	3836	1459	3023	1.8169	1.2929	1.1592	1.1096	1.3785	101.757066
MILLER	952.0	9000.8	18	4195.5	456	1530	384	5500	2001	4112	1.8168	1.0983	1.3782	1.0651	1.3899	101.748351
VERNON	450.4	8982.2	23	3620.5	335	1267	498	4724	1782	3619	0.8613	1.6263	1.2227	1.6082	1.4064	101.724934
SCHUYLER	110.6	1952.6	5	791.5	46	278	114	981	414	745	0.9730	1.6172	0.7652	1.7728	1.5872	101.715330
HENRY	716.0	8676.6	16	3570.5	318	1230	459	4641	1822	3637	1.4175	1.1472	1.1956	1.5088	1.4308	101.699843
DENT	475.8	6268.6	13	2736.0	255	841	229	3409	1613	2708	1.3038	1.2164	1.4022	1.0248	1.7012	101.648353
ST FRANCOIS	1952.0	22303.6	31	8930.5	985	3287	1232	11767	4001	9077	1.5033	0.8886	1.3858	1.5973	1.2589	101.633945
REYNOLDS	212.8	2186.6	4	1363.5	123	397	118	1660	738	1292	1.6717	0.7510	1.4327	1.0844	1.6314	101.571314
OZARK	251.6	3586.8	9	1534.5	107	424	133	1863	875	1561	1.2049	1.5015	1.1670	1.0891	1.6010	101.563458
TANEY	1475.2	17636.0	16	3777.0	324	1518	602	5003	1644	3878	1.4368	1.0845	0.9870	1.8357	1.2108	101.554786
TEXAS	840.2	9101.4	18	4252.5	402	1313	246	5492	2613	4272	1.5857	1.0836	1.4158	0.6833	1.7470	101.515467
WEBSTER	864.8	10436.4	31	4816.0	519	1773	290	6470	2350	4912	1.4234	1.6478	1.3537	0.6838	1.3664	101.475096

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COUNTY NAME	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	CHILD ABUSE/ NEGLECT VICTIMS	POPU-LATION UNDER 18	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO UNEM-PLOYMENT	RISK RATIO DEATH AGES 5-17	RISK RATIO MOMS' EDUC. <12 YRS	RISK RATIO CHILD ABUSE	RISK RATIO POVERTY	INDEX3
ST CLAIR	284.8	3675.8	7	1491.5	155	501	143	1852	650	1409	1.3309	1.2015	1.4307	1.1780	1.3176	101.458593
KNOX	113.0	1805.2	2	845.5	73	245	110	997	473	797	1.0752	0.6056	1.3779	1.6832	1.6950	101.436896
LACLEDE	1197.6	13515.6	26	5218.0	572	2046	401	6939	2648	5286	1.5220	1.2756	1.2928	0.8816	1.4308	101.402849
CALDWELL	244.6	3235.6	10	1583.0	123	543	138	2080	751	1577	1.2985	1.6172	1.0475	1.0122	1.3602	101.335533
BOLLINGER	408.2	4098.0	9	2014.0	180	734	161	2637	937	2007	1.7110	1.1440	1.1340	0.9314	1.3334	101.253898
BATES	530.8	6301.4	16	2882.5	215	976	281	3735	1233	2911	1.4469	1.4210	1.0187	1.1478	1.2098	101.244112
CRAWFORD	841.4	10224.0	19	3746.5	465	1386	200	4885	1801	3801	1.4136	1.2983	1.5515	0.6246	1.3533	101.241257
SALINE	732.6	11022.8	22	4386.5	443	1534	474	5578	1745	4236	1.1416	1.2839	1.3355	1.2964	1.1766	101.233983
BENTON	484.0	5672.8	6	2214.5	173	650	237	2784	1138	2214	1.4655	0.6936	1.2308	1.2987	1.4681	101.156715
CEDAR	320.2	4704.4	12	2064.5	167	706	142	2655	1121	2075	1.1691	1.4880	1.0939	0.8159	1.5430	101.109960
MONTGOMERY	359.4	5062.6	7	2179.5	205	761	295	2824	927	2209	1.2194	0.8222	1.2457	1.5936	1.1986	101.079565
LAWRENCE	836.2	14266.6	34	5859.0	544	2139	567	7637	2515	5873	1.0068	1.4856	1.1761	1.1326	1.2231	101.024191
DADE	172.8	3077.4	8	1320.5	80	472	167	1787	571	1325	0.9645	1.5509	0.7838	1.4257	1.2308	100.955762
MERCER	93.6	1437.6	4	657.5	30	173	64	794	284	652	1.1184	1.5574	0.8019	1.2297	1.2441	100.951472
NEWTON	1483.2	24201.0	38	8446.0	829	3115	954	11117	3512	8529	1.0527	1.1518	1.2307	1.3092	1.1761	100.920448
LEWIS	292.2	4908.6	9	1836.0	94	535	226	2270	792	1776	1.0225	1.2549	0.8125	1.5189	1.2737	100.882468
MARIES	309.6	3979.6	8	1528.5	104	463	97	1946	731	1502	1.3363	1.3399	1.0387	0.7604	1.3900	100.865407
MARION	788.6	14104.0	34	5498.5	458	1950	455	7152	2435	5501	0.9604	1.5830	1.0861	0.9706	1.2643	100.864348
CARROLL	397.8	4277.0	6	2150.5	191	729	173	2651	999	2132	1.5976	0.7143	1.2116	0.9956	1.3383	100.857354
STODDARD	1112.0	13579.0	20	5471.0	613	1787	225	6744	2715	5544	1.4067	0.9358	1.5863	0.5090	1.3987	100.836486
CAMDEN	1037.8	15557.8	23	4187.5	345	1649	378	5699	1905	4344	1.1458	1.4061	0.9675	1.0119	1.2525	100.783801
HOLT	140.8	2308.4	6	1151.5	61	344	104	1441	593	1147	1.0477	1.3339	0.8200	1.1010	1.4766	100.779309
SCOTT	1407.2	18716.8	30	8187.0	900	3128	647	10576	3497	8124	1.2914	0.9381	1.3305	0.9333	1.2294	100.722774
GASCONADE	523.4	7480.6	12	2459.0	203	927	271	3315	903	2553	1.2018	1.2493	1.0127	1.2472	1.0102	100.721174
HOWELL	972.2	14526.4	17	5944.0	614	2190	419	7814	3640	6055	1.1496	0.7322	1.2965	0.8180	1.7170	100.713304
RAY	722.8	10371.4	25	4574.5	338	1520	436	5931	1559	4633	1.1971	1.3991	1.0283	1.1215	0.9611	100.707043
GRUNDY	300.2	5051.0	12	1891.5	128	610	109	2355	873	1838	1.0209	1.6241	0.9704	0.7061	1.3566	100.678060
BUCHANAN	2702.0	42912.0	51	15507.5	1524	6210	1891	20398	6273	15455	1.0816	0.8419	1.1349	1.4143	1.1593	100.631918
HARRISON	199.6	4347.2	7	1484.5	65	456	163	1817	786	1425	0.7887	1.2071	0.6592	1.3686	1.5754	100.598951
PHELPS	882.8	17102.4	27	6034.5	486	2280	704	7943	2560	6008	0.8867	1.1454	0.9857	1.3521	1.2170	100.586927
RANDOLPH	710.6	11017.4	9	4545.5	456	1659	566	5796	1810	4551	1.1079	0.5069	1.2711	1.4898	1.1359	100.511543
COOPER	382.2	6911.2	19	2702.0	212	965	159	3422	900	2589	0.9499	1.8001	1.0159	0.7088	0.9929	100.467700
WORTH	61.4	1162.6	2	457.5	17	136	48	563	223	408	0.9072	1.1191	0.5780	1.3007	1.5611	100.466085
PULASKI	881.0	12992.0	28	8371.0	586	3797	811	11388	4533	7938	1.1648	0.8563	0.7137	1.0864	1.6310	100.452218
JASPER	2525.2	49532.0	56	16564.0	1817	6690	1832	21932	6831	16704	0.8757	0.8655	1.2560	1.2743	1.1680	100.439503

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COUNTY NAME	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	CHILD ABUSE/ NEGLECT VICTIMS	POPU-LATION UNDER 18	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO UNEM-PLOYMENT	RISK RATIO DEATH AGES 5-17	RISK RATIO MOMS' EDUC. <12 YRS	RISK RATIO CHILD ABUSE	RISK RATIO POVERTY	INDEX3
MONITEAU	412.2	6504.8	12	2546.0	225	817	126	3210	1094	2510	1.0885	1.2066	1.2735	0.5988	1.2449	100.412318
PUTNAM	105.6	2140.0	4	910.5	56	274	66	1074	466	863	0.8476	1.1247	0.9451	0.9375	1.5422	100.397154
FRANKLIN	3452.4	41483.4	87	16475.0	1498	6385	943	21865	5096	16730	1.4295	1.3519	1.0849	0.6580	0.8700	100.394282
PETTIS	1266.2	18727.0	28	6625.5	585	2552	525	8753	2697	6595	1.1614	1.0819	1.0601	0.9150	1.1680	100.386377
LINN	518.8	6627.6	15	2551.0	194	940	64	3261	1162	2603	1.3446	1.5053	0.9544	0.2994	1.2750	100.378694
WARREN	748.8	10063.8	17	3640.5	342	1600	329	5250	1316	3954	1.2781	1.1954	0.9885	0.9560	0.9506	100.368594
LINCOLN	1049.8	13886.0	31	5749.0	475	2320	421	8275	2030	6084	1.2986	1.3804	0.9468	0.7762	0.9530	100.354963
HOWARD	206.2	4548.8	9	1770.5	111	601	174	2258	758	1767	0.7786	1.3013	0.8541	1.1756	1.2252	100.334874
CLINTON	490.4	7504.8	20	3385.0	202	1056	237	4361	1152	3394	1.1224	1.5126	0.8846	0.8291	0.9694	100.318093
JACKSON	20129.8	341021.2	450	112433.0	12811	53592	11342	153181	38161	110636	1.0139	1.0246	1.1054	1.1296	0.9852	100.258714
POLK	572.2	11157.2	18	3764.0	294	1464	275	5056	1840	3894	0.8809	1.2242	0.9287	0.8298	1.3496	100.213187
AUDRAIN	606.2	10626.6	17	4729.5	378	1506	334	5902	2049	4658	0.9799	0.9202	1.1607	0.8633	1.2564	100.180476
CHRISTIAN	889.4	17406.6	31	6209.5	363	2470	802	8857	2271	6869	0.8777	1.2780	0.6796	1.3814	0.9443	100.161021
CLARK	227.0	3894.8	4	1592.0	101	406	89	1957	777	1518	1.0011	0.6432	1.1504	0.6938	1.4619	99.950476
MACON	539.0	8451.8	11	2936.5	180	862	155	3560	1178	2898	1.0954	0.9590	0.9656	0.6642	1.1610	99.845260
BARTON	215.8	5668.6	9	2157.0	159	743	163	2852	958	2186	0.6539	1.0682	0.9896	0.8719	1.2517	99.835268
JEFFERSON	6360.4	90371.0	145	35156.5	2628	13766	3132	48557	8666	36081	1.2089	1.0559	0.8828	0.9840	0.6860	99.817618
LAFAYETTE	956.2	15287.8	24	5883.0	407	2053	373	7805	2180	5925	1.0744	1.0444	0.9168	0.7291	1.0509	99.815435
CALLAWAY	845.2	16402.0	22	6110.0	482	2295	530	8159	1958	6150	0.8851	0.9218	0.9712	0.9910	0.9093	99.678444
ADAIR	451.4	11672.8	8	3524.0	212	1416	440	4697	1465	3512	0.6643	0.5812	0.6923	1.4291	1.1914	99.558288
BARRY	684.6	13607.4	9	4956.0	504	1904	257	6595	2495	5107	0.8642	0.4649	1.2241	0.5945	1.3954	99.543034
GREENE	5037.8	113123.8	129	33425.0	2494	14141	3017	45148	11262	34054	0.7650	0.9880	0.8156	1.0195	0.9446	99.532558
ANDREW	434.8	7218.6	15	2907.5	135	917	131	3753	984	2965	1.0346	1.3207	0.6808	0.5325	0.9479	99.516532
LIVINGSTON	330.6	6654.2	7	2728.5	206	988	203	3489	1076	2736	0.8534	0.6568	0.9642	0.8876	1.1232	99.485240
CHARITON	265.0	4318.0	8	1776.5	70	508	59	2269	742	1748	1.0542	1.1528	0.6372	0.3967	1.2124	99.453299
SULLIVAN	144.0	3432.2	2	1082.5	89	367	53	1309	542	1021	0.7207	0.4730	1.1214	0.6177	1.5152	99.448971
DE KALB	234.6	4020.8	7	1532.0	69	523	70	2021	600	1538	1.0022	1.1697	0.6101	0.5284	1.1142	99.424668
CASS	1935.8	33231.0	48	12729.5	813	4708	847	17601	3646	13173	1.0006	0.9653	0.7986	0.7341	0.7905	99.289148
STE GENEVIEVE	468.8	6605.4	9	3263.0	184	1063	165	4268	1096	3263	1.2191	0.7061	0.8005	0.5898	0.9593	99.274775
GENTRY	127.6	2753.4	2	1266.5	66	413	81	1591	627	1204	0.7960	0.4043	0.7390	0.7767	1.4874	99.203366
SHELBY	141.6	3542.0	5	1323.5	67	462	49	1706	652	1297	0.6867	0.9671	0.6706	0.4382	1.4358	99.198417
MONROE	251.4	4781.4	5	1839.0	86	537	78	2393	864	1854	0.9031	0.6960	0.7406	0.4973	1.3310	99.168047
RALLS	237.6	4369.6	6	1719.5	76	487	42	2128	731	1710	0.9340	0.8933	0.7217	0.3011	1.2210	99.071024
OSAGE	319.0	6551.2	15	2531.0	89	795	68	3145	657	2511	0.8364	1.5172	0.5177	0.3299	0.7473	98.948454
CAPE GIRARDEAU	1567.8	35864.8	29	10281.5	683	4279	675	13882	3358	10476	0.7509	0.7221	0.7381	0.7418	0.9155	98.868393

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JOHNSON	890.4	20689.2	20	6763.0	395	3292	449	9918	2708	7024	0.7392	0.7571	0.5549	0.6906	1.1011	98.842968
PERRY	519.2	9617.2	10	3425.5	197	1063	77	4425	1131	3420	0.9273	0.7473	0.8570	0.2655	0.9445	98.741675
BOONE	2001.0	69693.6	66	16818.0	1245	8531	1185	24290	4902	17305	0.4932	1.0046	0.6749	0.7443	0.8091	98.726009
COLE	1445.4	35675.2	46	11418.5	649	4540	559	15091	2496	11489	0.6959	1.0313	0.6611	0.5651	0.6205	98.573911
NODAWAY	353.0	11056.4	10	3510.0	109	1157	165	4654	1571	3581	0.5484	0.7293	0.4357	0.5409	1.2530	98.507288
ATCHISON	132.8	3211.4	3	1317.0	55	390	27	1586	532	1274	0.7103	0.5831	0.6522	0.2597	1.1927	98.398003
CLAY	3966.8	87243.4	94	27350.0	1568	11264	1160	37522	5290	27701	0.7810	0.8799	0.6437	0.4716	0.5454	98.321663
PLATTE	1389.6	33334.2	29	10405.5	533	4273	727	14440	1925	10911	0.7161	0.7135	0.5768	0.7681	0.5039	98.278329
ST CHARLES	5829.0	119225.6	106	41211.5	2053	18782	2267	61214	6779	44486	0.8398	0.6585	0.5055	0.5650	0.4352	98.003943
ST LOUIS COUNTY	24083.2	556844.6	455	176580.5	8157	71992	8589	231979	28680	172970	0.7429	0.6596	0.5240	0.5648	0.4736	97.964919

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Section 3

Individually Sorted Health Status Indicators

COUNTY NAME	INDEX	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	RISK RATIO DEATH AGES 5-17
SCOTLAND	0.00231506	13	902.5	3.68754
CARTER	0.00354788	14	1128.0	3.17731
DOUGLAS	0.00568220	20	2324.0	2.20310
OREGON	0.00420104	14	1771.0	2.02372
DALLAS	0.00564931	19	2412.0	2.01659
COOPER	0.00271188	19	2702.0	1.80015
HICKORY	0.00235855	7	1056.0	1.69697
WEBSTER	0.00809188	31	4816.0	1.64784
VERNON	0.00638673	23	3620.5	1.62630
DAVIESS	0.00320033	10	1575.0	1.62540
GRUNDY	0.00253934	12	1891.5	1.62411
SCHUYLER	0.00142896	5	791.5	1.61718
CALDWELL	0.00251520	10	1583.0	1.61718
MARION	0.00754572	34	5498.5	1.58298
WRIGHT	0.01035891	21	3408.5	1.57724
MORGAN	0.00472592	16	2597.0	1.57721
PIKE	0.00635135	20	3255.5	1.57272
MERCER	0.00089966	4	657.5	1.55742
DADE	0.00181597	8	1320.5	1.55093
IRON	0.00449548	13	2168.5	1.53470
WAYNE	0.00488042	12	2017.0	1.52306
OSAGE	0.00141540	15	2531.0	1.51719
CLINTON	0.00337256	20	3385.0	1.51256
LINN	0.00321044	15	2551.0	1.50529
OZARK	0.00292271	9	1534.5	1.50147
CEDAR	0.00344600	12	2064.5	1.48801
LAWRENCE	0.00813563	34	5859.0	1.48558
BATES	0.00417981	16	2882.5	1.42099
MCDONALD	0.00666772	18	3260.0	1.41350
CAMDEN	0.00581244	23	4187.5	1.40609
RAY	0.00498293	25	4574.5	1.39906
LINCOLN	0.00601772	31	5749.0	1.38042
DUNKLIN	0.01877375	36	6681.0	1.37944
NEW MADRID	0.01117550	25	4706.5	1.35982
FRANKLIN	0.01556760	87	16475.0	1.35187
MARIES	0.00220176	8	1528.5	1.33988
HOLT	0.00171697	6	1151.5	1.33391
WASHINGTON	0.01258518	23	4417.0	1.33303
ANDREW	0.00236281	15	2907.5	1.32072
ST LOUIS CITY	0.19059945	369	71863.0	1.31450
HOWARD	0.00209629	9	1770.5	1.30133
CRAWFORD	0.00593037	19	3746.5	1.29828
STONE	0.00528699	15	2970.0	1.29293

VITAL STATISTICS DATA - ALL DEATHS AGES 5-17 1983-1992
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COUNTY NAME	INDEX	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	RISK RATIO DEATH AGES 5-17
SALINE	0.00594483	22	4386.5	1.28394
CHRISTIAN	0.00644940	31	6209.5	1.27804
LACLEDE	0.00887195	26	5218.0	1.27559
LEWIS	0.00245697	9	1836.0	1.25490
GASCONADE	0.00286367	12	2459.0	1.24929
POLK	0.00478301	18	3764.0	1.22423
DENT	0.00537229	13	2736.0	1.21638
MISSISSIPPI	0.00752051	15	3159.0	1.21558
HARRISON	0.00212817	7	1484.5	1.20714
MONITEAU	0.00306835	12	2546.0	1.20660
ST CLAIR	0.00224930	7	1491.5	1.20148
SHANNON	0.00341154	7	1494.0	1.19947
WARREN	0.00391373	17	3640.5	1.19544
DE KALB	0.00133627	7	1532.0	1.16971
CHARITON	0.00161785	8	1776.5	1.15283
NEWTON	0.01122998	38	8446.0	1.15179
HENRY	0.00646695	16	3570.5	1.14718
PHELPS	0.00753288	27	6034.5	1.14542
BOLLINGER	0.00310360	9	2014.0	1.14399
PUTNAM	0.00120865	4	910.5	1.12466
WORTH	0.00058593	2	457.5	1.11913
MADISON	0.00452914	9	2076.0	1.10983
MILLER	0.00722506	18	4195.5	1.09832
TANEY	0.00592308	16	3777.0	1.08446
TEXAS	0.00839179	18	4252.5	1.08360
PETTIS	0.00765816	28	6625.5	1.08188
BARTON	0.00230951	9	2157.0	1.06815
JEFFERSON	0.02413076	145	35156.5	1.05585
LAFAYETTE	0.00552050	24	5883.0	1.04437
COLE	0.00496632	46	11418.5	1.03131
JACKSON	0.11089471	450	112433.0	1.02461
BOONE	0.00957051	66	16818.0	1.00464
BUTLER	0.01523552	29	7422.0	1.00027
GREENE	0.02708723	129	33425.0	0.98800
SHELBY	0.00121153	5	1323.5	0.96713
CASS	0.00856992	48	12729.5	0.96532
MACON	0.00291976	11	2936.5	0.95897
RIPLEY	0.00622382	9	2416.5	0.95345
SCOTT	0.01058472	30	8187.0	0.93807
STODDARD	0.00811689	20	5471.0	0.93584
PEMISCOT	0.01612266	18	4993.0	0.92289
CALLAWAY	0.00496373	22	6110.0	0.92177
AUDRAIN	0.00540952	17	4729.5	0.92018

VITAL STATISTICS DATA - ALL DEATHS AGES 5-17 1983-1992
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COUNTY NAME	INDEX	DEATHS: ALL CAUSES AGES 5-17	POPULATION AGES 5-17	RISK RATIO DEATH AGES 5-17
RALLS	0.00140135	6	1719.5	0.89328
ST FRANCOIS	0.01452134	31	8930.5	0.88864
CLAY	0.00979833	94	27350.0	0.87985
JASPER	0.01966822	56	16564.0	0.86549
PULASKI	0.01165057	28	8371.0	0.85629
BUCHANAN	0.01892628	51	15507.5	0.84192
MONTGOMERY	0.00304619	7	2179.5	0.82221
JOHNSON	0.00498356	20	6763.0	0.75706
REYNOLDS	0.00245361	4	1363.5	0.75101
PERRY	0.00212707	10	3425.5	0.74734
HOWELL	0.00978980	17	5944.0	0.73217
NODAWAY	0.00237920	10	3510.0	0.72935
CAPE GIRARDEAU	0.00665116	29	10281.5	0.72207
CARROLL	0.00303857	6	2150.5	0.71425
PLATTE	0.00358094	29	10405.5	0.71347
STE GENEVIEVE	0.00244392	9	3263.0	0.70610
MONROE	0.00164848	5	1839.0	0.69603
BENTON	0.00359181	6	2214.5	0.69361
ST LOUIS COUNTY	0.04424644	455	176580.5	0.65964
ST CHARLES	0.01152782	106	41211.5	0.65846
LIVINGSTON	0.00243301	7	2728.5	0.65677
CLARK	0.00182350	4	1592.0	0.64322
KNOX	0.00150944	2	845.5	0.60556
ATCHISON	0.00078901	3	1317.0	0.58314
ADAIR	0.00331838	8	3524.0	0.58116
RANDOLPH	0.00533385	9	4545.5	0.50688
SULLIVAN	0.00106927	2	1082.5	0.47298
BARRY	0.00528099	9	4956.0	0.46489
GENTRY	0.00114540	2	1266.5	0.40426

VITAL STATISTICS DATA - ALL DEATHS AGES 5-17 1983-1992
USING AVERAGE POPULATION ESTIMATES FOR YEARS 1987 & 1988 AGES 5-17 AS DENOMINATOR

COUNTY NAME	INDEX	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	RISK RATIO MOMS' EDUC. <12 YRS
PEMISCOT	0.01612266	951	2023	2.17388
DUNKLIN	0.01877375	1054	2437	2.00003
RIPLEY	0.00622382	363	854	1.96562
WAYNE	0.00488042	317	766	1.91374
WASHINGTON	0.01258518	620	1512	1.89623
BUTLER	0.01523552	1007	2587	1.80005
ST LOUIS CITY	0.19059945	15169	40636	1.72622
MISSISSIPPI	0.00752051	407	1091	1.72513
NEW MADRID	0.01117550	590	1589	1.71704
MORGAN	0.00472592	377	1017	1.71424
MCDONALD	0.00666772	476	1302	1.69063
CARTER	0.00354788	146	400	1.68789
DAVIESS	0.00320033	204	566	1.66673
STODDARD	0.00811689	613	1787	1.58631
CRAWFORD	0.00593037	465	1386	1.55146
DALLAS	0.00564931	294	882	1.54145
SCOTLAND	0.00231506	103	317	1.50255
WRIGHT	0.01035891	370	1176	1.45494
IRON	0.00449548	215	684	1.45356
MADISON	0.00452914	226	727	1.43756
REYNOLDS	0.00245361	123	397	1.43274
ST CLAIR	0.00224930	155	501	1.43069
TEXAS	0.00839179	402	1313	1.41584
OREGON	0.00420104	171	560	1.41208
SHANNON	0.00341154	176	579	1.40568
DOUGLAS	0.00568220	236	778	1.40276
DENT	0.00537229	255	841	1.40215
ST FRANCOIS	0.01452134	985	3287	1.38576
MILLER	0.00722506	456	1530	1.37824
KNOX	0.00150944	73	245	1.37787
WEBSTER	0.00809188	519	1773	1.35366
SALINE	0.00594483	443	1534	1.33546
SCOTT	0.01058472	900	3128	1.33054
HOWELL	0.00978980	614	2190	1.29651
LACLEDE	0.00887195	572	2046	1.29283
PIKE	0.00635135	318	1148	1.28096
MONITEAU	0.00306835	225	817	1.27354
RANDOLPH	0.00533385	456	1659	1.27107
JASPER	0.01966822	1817	6690	1.25597
MONTGOMERY	0.00304619	205	761	1.24572
BENTON	0.00359181	173	650	1.23079
NEWTON	0.01122998	829	3115	1.23069
BARRY	0.00528099	504	1904	1.22409

MOTHERS GIVING BIRTH IN 1988-92 WITH LESS THAN A HIGH SCHOOL EDUCATION
USING TOTAL NUMBER OF LIVE BIRTHS 1988-92 AS DENOMINATOR

COUNTY NAME	INDEX	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	RISK RATIO MOMS' EDUC. <12 YRS
VERNON	0.00638673	335	1267	1.22270
CARROLL	0.00303857	191	729	1.21159
HENRY	0.00646695	318	1230	1.19557
LAWRENCE	0.00813563	544	2139	1.17609
OZARK	0.00292271	107	424	1.16700
AUDRAIN	0.00540952	378	1506	1.16070
STONE	0.00528699	284	1133	1.15915
CLARK	0.00182350	101	406	1.15039
BUCHANAN	0.01892628	1524	6210	1.13487
BOLLINGER	0.00310360	180	734	1.13404
SULLIVAN	0.00106927	89	367	1.12144
HICKORY	0.00235855	82	339	1.11858
JACKSON	0.11089471	12811	53592	1.10544
CEDAR	0.00344600	167	706	1.09386
MARION	0.00754572	458	1950	1.08613
FRANKLIN	0.01556760	1498	6385	1.08493
PETTIS	0.00765816	585	2552	1.06005
CALDWELL	0.00251520	123	543	1.04751
MARIES	0.00220176	104	463	1.03873
RAY	0.00498293	338	1520	1.02831
BATES	0.00417981	215	976	1.01869
COOPER	0.00271188	212	965	1.01592
GASCONADE	0.00286367	203	927	1.01267
BARTON	0.00230951	159	743	0.98960
WARREN	0.00391373	342	1600	0.98846
TANEY	0.00592308	324	1518	0.98702
PHELPS	0.00753288	486	2280	0.98572
CALLAWAY	0.00496373	482	2295	0.97122
GRUNDY	0.00253934	128	610	0.97036
CAMDEN	0.00581244	345	1649	0.96750
MACON	0.00291976	180	862	0.96564
LIVINGSTON	0.00243301	206	988	0.96419
LINN	0.00321044	194	940	0.95439
LINCOLN	0.00601772	475	2320	0.94680
PUTNAM	0.00120865	56	274	0.94512
POLK	0.00478301	294	1464	0.92866
LAFAYETTE	0.00552050	407	2053	0.91676
CLINTON	0.00337256	202	1056	0.88458
JEFFERSON	0.02413076	2628	13766	0.88281
PERRY	0.00212707	197	1063	0.85701
HOWARD	0.00209629	111	601	0.85408
HOLT	0.00171697	61	344	0.82002
GREENE	0.02708723	2494	14141	0.81558

MOTHERS GIVING BIRTH IN 1988-92 WITH LESS THAN A HIGH SCHOOL EDUCATION
USING TOTAL NUMBER OF LIVE BIRTHS 1988-92 AS DENOMINATOR

COUNTY NAME	INDEX	LIVE BIRTHS: MOM'S EDUC. < 12	LIVE BIRTHS	RISK RATIO MOMS' EDUC. <12 YRS
LEWIS	0.00245697	94	535	0.81250
MERCER	0.00089966	30	173	0.80191
STE GENEVIEVE	0.00244392	184	1063	0.80045
CASS	0.00856992	813	4708	0.79856
DADE	0.00181597	80	472	0.78379
SCHUYLER	0.00142896	46	278	0.76518
MONROE	0.00164848	86	537	0.74059
GENTRY	0.00114540	66	413	0.73900
CAPE GIRARDEAU	0.00665116	683	4279	0.73812
RALLS	0.00140135	76	487	0.72167
PULASKI	0.01165057	586	3797	0.71369
ADAIR	0.00331838	212	1416	0.69235
ANDREW	0.00236281	135	917	0.68079
CHRISTIAN	0.00644940	363	2470	0.67961
BOONE	0.00957051	1245	8531	0.67487
SHELBY	0.00121153	67	462	0.67063
COLE	0.00494632	649	4540	0.66106
HARRISON	0.00212817	65	456	0.65917
ATCHISON	0.00078901	55	390	0.65215
CLAY	0.00979833	1568	11264	0.64373
CHARITON	0.00161785	70	508	0.63721
DE KALB	0.00133627	69	523	0.61010
WORTH	0.00058593	17	136	0.57804
PLATTE	0.00358094	533	4273	0.57683
JOHNSON	0.00498356	395	3292	0.55487
ST LOUIS COUNTY	0.04424644	8157	71992	0.52396
OSAGE	0.00141540	89	795	0.51770
ST CHARLES	0.01152782	2053	18782	0.50547
NODAWAY	0.00237920	109	1157	0.43566

MOTHERS GIVING BIRTH IN 1988-92 WITH LESS THAN A HIGH SCHOOL EDUCATION
USING TOTAL NUMBER OF LIVE BIRTHS 1988-92 AS DENOMINATOR

COUNTY NAME	INDEX	CHILD ABUSE/ NEGLECT VICTIMS	POPU- LATION UNDER 18	RISK RATIO CHILD ABUSE
WRIGHT	0.01035891	826	4470	2.81907
DUNKLIN	0.01877375	1386	8236	2.56733
PEMISCOT	0.01612266	1036	6386	2.47494
MADISON	0.00452914	381	2698	2.15435
ST LOUIS CITY	0.19059945	13214	95468	2.11159
NEW MADRID	0.01117550	709	5793	1.86714
TANEY	0.00592308	602	5003	1.83569
SCHUYLER	0.00142896	114	981	1.77284
KNOX	0.00150944	110	997	1.68318
VERNON	0.00638673	498	4724	1.60825
ST FRANCOIS	0.01452134	1232	11767	1.59727
MONTGOMERY	0.00304619	295	2824	1.59364
PIKE	0.00635135	429	4118	1.58930
MCDONALD	0.00666772	444	4451	1.52181
LEWIS	0.00245697	226	2270	1.51886
HENRY	0.00646695	459	4641	1.50881
RANDOLPH	0.00533385	566	5796	1.48978
SHANNON	0.00341154	186	1921	1.47713
ADAIR	0.00331838	440	4697	1.42911
DADE	0.00181597	167	1787	1.42569
BUCHANAN	0.01892628	1891	20398	1.41429
CHRISTIAN	0.00644940	802	8857	1.38141
HARRISON	0.00212817	163	1817	1.36857
PHELPS	0.00753288	704	7943	1.35214
WASHINGTON	0.01258518	507	5734	1.34891
NEWTON	0.01122998	954	11117	1.30917
WORTH	0.00058593	48	563	1.30067
BENTON	0.00359181	237	2784	1.29871
SALINE	0.00594483	474	5578	1.29638
JASPER	0.01966822	1832	21932	1.27433
GASCONADE	0.00286367	271	3315	1.24715
MERCER	0.00089966	64	794	1.22968
OREGON	0.00420104	169	2098	1.22890
DOUGLAS	0.00568220	240	3009	1.21681
HICKORY	0.00235855	104	1333	1.19025
BUTLER	0.01523552	733	9412	1.18811
ST CLAIR	0.00224930	143	1852	1.17796
HOWARD	0.00209629	174	2258	1.17560
RIPLEY	0.00622382	235	3093	1.15910
BATES	0.00417981	281	3735	1.14776
LAWRENCE	0.00813563	567	7637	1.13265
MISSISSIPPI	0.00752051	293	3957	1.12963
JACKSON	0.11089471	11342	153181	1.12958
RAY	0.00498293	436	5931	1.12148

FROM MISSOURI DIVISON OF FAMILY SERVICES ANNUAL REPORTS 1988-92: CHILD ABUSE/NEGLECT -REPORTED VICTIMS WITH REASON TO SUSPECT
USING 1990 CENSUS POPULATION AGES LESS THAN 18 AS DENOMINATOR

BEST COPY AVAILABLE

COUNTY NAME	INDEX	CHILD ABUSE/ NEGLECT VICTIMS	POPU- LATION UNDER 18	RISK RATIO CHILD ABUSE
STONE	0.00528699	279	3836	1.10958
HOLT	0.00171697	104	1441	1.10104
OZARK	0.00292271	133	1863	1.08911
PULASKI	0.01165057	811	11388	1.08644
REYNOLDS	0.00245361	118	1660	1.08445
MILLER	0.00722506	384	5500	1.06513
DENT	0.00537229	229	3409	1.02481
GREENE	0.02708723	3017	45148	1.01946
CALDWELL	0.00251520	138	2080	1.01216
CAMDEN	0.00581244	378	5699	1.01188
CARROLL	0.00303857	173	2651	0.99557
CALLAWAY	0.00496373	530	8159	0.99100
JEFFERSON	0.02413076	3132	48557	0.98402
DAVIESS	0.00320033	128	2003	0.97491
MARION	0.00754572	455	7152	0.97055
WARREN	0.00391373	329	5250	0.95603
PUTNAM	0.00120865	66	1074	0.93751
MORGAN	0.00472592	209	3416	0.93339
SCOTT	0.01058472	647	10576	0.93329
BOLLINGER	0.00310360	161	2637	0.93143
PETTIS	0.00765816	525	8753	0.91503
LIVINGSTON	0.00243301	203	3489	0.88762
LACLEDE	0.00887195	401	6939	0.88162
IRON	0.00449548	155	2685	0.88069
BARTON	0.00230951	163	2852	0.87191
AUDRAIN	0.00540952	334	5902	0.86334
SCOTLAND	0.00231506	64	1156	0.84461
POLK	0.00478301	275	5056	0.82977
CLINTON	0.00337256	237	4361	0.82908
HOWELL	0.00978980	419	7814	0.81804
CEDAR	0.00344600	142	2655	0.81594
GENTRY	0.00114540	81	1591	0.77669
LINCOLN	0.00601772	421	8275	0.77615
PLATTE	0.00358094	727	14440	0.76807
MARIES	0.00220176	97	1946	0.76044
BOONE	0.00957051	1185	24290	0.74426
CAPE GIRARDEAU	0.00665116	675	13882	0.74180
CASS	0.00856992	847	17601	0.73414
LAFAYETTE	0.00552050	373	7805	0.72907
COOPER	0.00271188	159	3422	0.70884
GRUNDY	0.00253934	109	2355	0.70611
CLARK	0.00182350	89	1957	0.69380
JOHNSON	0.00498356	449	9918	0.69065
WEBSTER	0.00809188	290	6470	0.68380

FROM MISSOURI DIVISON OF FAMILY SERVICES ANNUAL REPORTS 1988-92: CHILD ABUSE/NEGLECT -REPORTED VICTIMS WITH REASON TO SUSPECT
USING 1990 CENSUS POPULATION AGES LESS THAN 18 AS DENOMINATOR

COUNTY NAME	INDEX	CHILD ABUSE/ NEGLECT VICTIMS	POPU- LATION UNDER 18	RISK RATIO CHILD ABUSE
TEXAS	0.00839179	246	5492	0.68334
MACON	0.00291976	155	3560	0.66423
FRANKLIN	0.01556760	943	21865	0.65796
CARTER	0.00354788	62	1441	0.65639
CRAWFORD	0.00593037	200	4885	0.62460
SULLIVAN	0.00106927	53	1309	0.61769
MONITEAU	0.00306835	126	3210	0.59882
BARRY	0.00528099	257	6595	0.59450
STE GENEVIEVE	0.00244392	165	4268	0.58978
COLE	0.00494632	559	15091	0.56510
ST CHARLES	0.01152782	2267	61214	0.56498
ST LOUIS COUNTY	0.04424644	8589	231979	0.56484
MODAWAY	0.00237920	165	4654	0.54087
ANDREW	0.00236281	131	3753	0.53251
DE KALB	0.00133627	70	2021	0.52840
WAYNE	0.00488042	89	2578	0.52667
STODDARD	0.00811689	225	6744	0.50898
DALLAS	0.00564931	105	3213	0.49855
MONROE	0.00164843	78	2393	0.49726
CLAY	0.00979833	1160	37522	0.47164
SHELBY	0.00121153	49	1706	0.43818
CHARITON	0.00161785	59	2269	0.39669
OSAGE	0.00141540	68	3145	0.32985
RALLS	0.00140135	42	2128	0.30110
LINN	0.00321044	64	3261	0.29941
PERRY	0.00212707	77	4425	0.26547
ATCHISON	0.00078901	27	1586	0.25971

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FROM MISSOURI DIVISON OF FAMILY SERVICES ANNUAL REPORTS 1988-92: CHILD ABUSE/NEGLECT -REPORTED VICTIMS WITH REASON TO SUSPECT
USING 1990 CENSUS POPULATION AGES LESS THAN 18 AS DENOMINATOR

COUNTY NAME	INDEX	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	RISK RATIO UNEM-PLOYMENT
WASHINGTON	0.01258518	1057.6	6700.4	2.71125
IRON	0.00449548	407.2	2751.2	2.54235
CARTER	0.00354788	223.6	2096.0	1.83244
STONE	0.00528699	936.8	8856.4	1.81693
MILLER	0.00722506	952.0	9000.8	1.81679
DALLAS	0.00564931	428.8	4087.4	1.80201
MADISON	0.00452914	475.2	4617.4	1.76778
WAYNE	0.00488042	531.4	5163.6	1.76774
SHANNON	0.00341154	336.2	3277.6	1.76194
BOLLINGER	0.00310360	408.2	4098.0	1.71100
REYNOLDS	0.00245361	212.8	2186.6	1.67167
CARROLL	0.00303857	397.8	4277.0	1.59763
TEXAS	0.00839179	840.2	9101.4	1.58571
MISSISSIPPI	0.00752051	633.2	6901.0	1.57608
LACLEDE	0.00887195	1197.6	13515.6	1.52204
ST FRANCOIS	0.01452134	1952.0	22303.6	1.50333
PEMISCOT	0.01612266	770.2	8982.4	1.47286
BENTON	0.00359181	484.0	5672.8	1.46554
ST LOUIS CITY	0.19059945	15569.6	183828.8	1.45483
BATES	0.00417981	530.8	6301.4	1.44692
TANEY	0.00592308	1475.2	17636.0	1.43681
DUNKLIN	0.01877375	1145.0	13722.6	1.43324
FRANKLIN	0.01556760	3452.4	41483.4	1.42954
RIPLEY	0.00622382	359.2	4328.0	1.42560
WEBSTER	0.00809188	864.8	10436.4	1.42336
HENRY	0.00646695	716.0	8676.6	1.41747
WRIGHT	0.01035891	588.8	7140.4	1.41643
CRAWFORD	0.00593037	841.4	10224.0	1.41362
NEW MADRID	0.01117550	814.8	9944.6	1.40739
STODDARD	0.00811689	1112.0	13579.0	1.40665
BUTLER	0.01523552	1380.4	17368.4	1.36519
DOUGLAS	0.00568220	379.0	4804.6	1.35498
LINN	0.00321044	518.8	6627.6	1.34460
MARIES	0.00220176	309.6	3979.6	1.33632
ST CLAIR	0.00224930	284.8	3675.8	1.33088
DENT	0.00537229	475.8	6268.6	1.30378
LINCOLN	0.00601772	1049.8	13886.0	1.29861
CALDWELL	0.00251520	244.6	3235.6	1.29853
SCOTT	0.01058472	1407.2	18716.8	1.29144
OREGON	0.00420104	271.2	3634.6	1.28169
HICKORY	0.00235855	211.2	2835.8	1.27929
WARREN	0.00391373	748.8	10063.8	1.27807
PIKE	0.00635135	561.4	7741.6	1.24564
MONTGOMERY	0.00304619	359.4	5062.6	1.21942

UNEPLOYMENT DATA - DIVISION OF EMPLOYMENT SECURITY - AVERAGE MONTHLY NUMBER OF UNEMPLOYED WORKERS: 1988-92
AVERAGE MONTHLY NUMBER OF WORKERS IN THE CIVILIAN LABOR FORCE AS DENOMINATOR

COUNTY NAME	INDEX	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	RISK RATIO UNEM-PLOYMENT
STE GENEVIEVE	0.00244392	468.8	6605.4	1.21910
MORGAN	0.00472592	546.0	7700.8	1.21789
JEFFERSON	0.02413076	6360.4	90371.0	1.20894
OZARK	0.00292271	251.6	3586.8	1.20491
GASCONADE	0.00286367	523.4	7480.6	1.20184
RAY	0.00498293	722.8	10371.4	1.19710
CEDAR	0.00344600	320.2	4704.4	1.16914
PULASKI	0.01165057	881.0	12992.0	1.16479
PETTIS	0.00765816	1266.2	18727.0	1.16140
HOWELL	0.00978980	972.2	14526.4	1.14960
CAMDEN	0.00581244	1037.8	15557.8	1.14582
SALINE	0.00594483	732.6	11022.8	1.14163
CLINTON	0.00337256	490.4	7504.8	1.12243
MERCER	0.00089966	93.6	1437.6	1.11837
RANDOLPH	0.00533385	710.6	11017.4	1.10789
MACON	0.00291976	539.0	8451.8	1.09544
MONITEAU	0.00306835	412.2	6504.8	1.08849
BUCHANAN	0.01892628	2702.0	42912.0	1.08157
KNOX	0.00150944	113.0	1805.2	1.07523
LAFAYETTE	0.00552050	956.2	15287.8	1.07437
DAVIESS	0.00320033	233.4	3733.2	1.07391
CHARITON	0.00161785	265.0	4318.0	1.05418
NEWTON	0.01122998	1483.2	24201.0	1.05273
HOLT	0.00171697	140.8	2308.4	1.04771
ANDREW	0.00236281	434.8	7218.6	1.03463
LEWIS	0.00245697	292.2	4908.6	1.02252
GRUNDY	0.00253934	300.2	5051.0	1.02090
JACKSON	0.11089471	20129.8	341021.2	1.01393
LAWRENCE	0.00813563	836.2	14266.6	1.00679
DE KALB	0.00133627	234.6	4020.8	1.00222
CLARK	0.00182350	227.0	3894.8	1.00113
CASS	0.00856992	1935.8	33231.0	1.00061
AUDRAIN	0.00540952	606.2	10626.6	0.97988
SCHUYLER	0.00142896	110.6	1952.6	0.97295
DADE	0.00181597	172.8	3077.4	0.96452
MARION	0.00754572	788.6	14104.0	0.96043
COOPER	0.00271188	382.2	6911.2	0.94992
RALLS	0.00140135	237.6	4369.6	0.93402
PERRY	0.00212707	519.2	9617.2	0.92733
WORTH	0.00058593	61.4	1162.6	0.90717
MONROE	0.00164848	251.4	4781.4	0.90315
PHELPS	0.00753288	882.8	17102.4	0.88666
CALLAWAY	0.00496373	845.2	16402.0	0.88514
POLK	0.00478301	572.2	11157.2	0.88093

UNEPLOYMENT DATA - DIVISION OF EMPLOYMENT SECURITY - AVERAGE MONTHLY NUMBER OF UNEMPLOYED WORKERS: 1988-92
AVERAGE MONTHLY NUMBER OF WORKERS IN THE CIVILIAN LABOR FORCE AS DENOMINATOR

COUNTY NAME	INDEX	UNEMPLOYED WORKERS	CIVILIAN LABOR FORCE	RISK RATIO UNEM-PLOYMENT
CHRISTIAN	0.00644940	889.4	17406.6	0.87767
JASPER	0.01966822	2525.2	49532.0	0.87571
BARRY	0.00528099	684.6	13607.4	0.86419
VERNON	0.00638673	450.4	8982.2	0.86132
LIVINGSTON	0.00243301	330.6	6654.2	0.85341
PUTNAM	0.00120865	105.6	2140.0	0.84762
ST CHARLES	0.01152782	5829.0	119225.6	0.83980
SCOTLAND	0.00231506	104.8	2151.2	0.83682
OSAGE	0.00141540	319.0	6551.2	0.83641
MCDONALD	0.00666772	467.4	9865.8	0.81378
GENTRY	0.00114540	127.6	2753.4	0.79603
HARRISON	0.00212817	199.6	4347.2	0.78868
CLAY	0.00979833	3966.8	87243.4	0.78101
HOWARD	0.00209629	206.2	4548.8	0.77865
GREENE	0.02708723	5037.8	113123.8	0.76496
CAPE GIRARDEAU	0.00665116	1567.8	35864.8	0.75088
ST LOUIS COUNTY	0.04424644	24083.2	556844.6	0.74290
JOHNSON	0.00498356	890.4	20689.2	0.73925
SULLIVAN	0.00106927	144.0	3432.2	0.72067
PLATTE	0.00358094	1389.6	33334.2	0.71606
ATCHISON	0.00078901	132.8	3211.4	0.71032
COLE	0.00496632	1445.4	35675.2	0.69594
SHELBY	0.00121153	141.6	3542.0	0.68670
ADAIR	0.00331838	451.4	11672.8	0.66426
BARTON	0.00230951	215.8	5668.6	0.65392
NODAWAY	0.00237920	353.0	11056.4	0.54842
BOONE	0.00957051	2001.0	69693.6	0.49318

UNEPLOYMENT DATA - DIVISION OF EMPLOYMENT SECURITY - AVERAGE MONTHLY NUMBER OF UNEMPLOYED WORKERS: 1988-92
AVERAGE MONTHLY NUMBER OF WORKERS IN THE CIVILIAN LABOR FORCE AS DENOMINATOR

COUNTY NAME	INDEX	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO POVERTY
PEMISCOT	0.01612266	3385	4893	1.97589
RIPLEY	0.00622382	1679	2428	1.97507
MISSISSIPPI	0.00752051	1977	3122	1.80865
CARTER	0.00354788	716	1155	1.77056
WAYNE	0.00488042	1264	2040	1.76969
HICKORY	0.00235855	663	1072	1.76644
TEXAS	0.00839179	2613	4272	1.74698
OREGON	0.00420104	1049	1722	1.73989
HOWELL	0.00978980	3640	6055	1.71699
WRIGHT	0.01035891	2111	3516	1.71482
ST LOUIS CITY	0.19059945	40078	66904	1.71094
SHANNON	0.00341154	867	1450	1.70778
DENT	0.00537229	1613	2708	1.70124
KNOX	0.00150944	473	797	1.69505
DOUGLAS	0.00568220	1365	2338	1.66751
DUNKLIN	0.01877375	3757	6504	1.64983
DALLAS	0.00564931	1431	2482	1.64671
SCOTLAND	0.00231506	500	869	1.64335
WASHINGTON	0.01258518	2558	4459	1.63849
BUTLER	0.01523552	4218	7356	1.63774
REYNOLDS	0.00245361	738	1292	1.63145
PULASKI	0.01165057	4533	7938	1.63100
NEW MADRID	0.01117550	2608	4575	1.62816
DAVIESS	0.00320033	890	1571	1.61806
OZARK	0.00292271	875	1561	1.60098
SCHUYLER	0.00142896	414	745	1.58717
HARRISON	0.00212817	786	1425	1.57539
WORTH	0.00058593	223	408	1.56108
MCDONALD	0.00666772	1819	3329	1.56062
CEDAR	0.00344600	1121	2075	1.54300
PUTNAM	0.00120865	466	863	1.54225
SULLIVAN	0.00106927	542	1021	1.51619
PIKE	0.00635135	1657	3175	1.49059
GENTRY	0.00114540	627	1204	1.48738
HOLT	0.00171697	593	1147	1.47663
BENTON	0.00359181	1138	2214	1.46806
CLARK	0.00182350	777	1518	1.46194
MORGAN	0.00472592	1289	2549	1.44432
MADISON	0.00452914	1039	2060	1.44055
SHELBY	0.00121153	652	1297	1.43578
HENRY	0.00646695	1822	3637	1.43082
LACLEDE	0.00887195	2648	5286	1.43077
IRON	0.00449548	1041	2086	1.42533

1990 CENSUS POPULATION WITH INCOME <185% OF POVERTY LEVEL AND TOTAL POP. WITH KNOWN INCOME ACQUIRED FROM SPECIAL COMPUTER RUN BY THE CENSUS BUREAU USING DHHS AVERAGE ANNUAL POVERTY INCOME GUIDELINES

C - 21

COUNTY NAME	INDEX	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO POVERTY
VERNON	0.00638673	1782	3619	1.40637
STODDARD	0.00811689	2715	5544	1.39871
BARRY	0.00528099	2495	5107	1.39535
MARIES	0.00220176	731	1502	1.39004
MILLER	0.00722506	2001	4112	1.38987
STONE	0.00528699	1459	3023	1.37847
WEBSTER	0.00809188	2350	4912	1.36644
CALDWELL	0.00251520	751	1577	1.36015
GRUNDY	0.00253934	873	1838	1.35659
CRAWFORD	0.00593037	1801	3801	1.35330
POLK	0.00478301	1840	3894	1.34959
CARROLL	0.00303857	999	2132	1.33831
BOLLINGER	0.00310360	937	2007	1.33343
MONROE	0.00164848	864	1854	1.33102
ST CLAIR	0.00224930	650	1409	1.31760
LINN	0.00321044	1162	2603	1.27500
LEWIS	0.00245697	792	1776	1.27368
MARION	0.00754572	2435	5501	1.26426
ST FRANCOIS	0.01452134	4001	9077	1.25894
AUDRAIN	0.00540952	2049	4658	1.25638
NODAWAY	0.00237920	1571	3581	1.25300
CAMDEN	0.00581244	1905	4344	1.25252
BARTON	0.00230951	958	2186	1.25168
MONITEAU	0.00306835	1094	2510	1.24487
MERCER	0.00089966	284	652	1.24409
DADE	0.00181597	571	1325	1.23084
SCOTT	0.01058472	3497	8124	1.22943
HOWARD	0.00209629	758	1767	1.22521
LAWRENCE	0.00813563	2515	5873	1.22309
RALLS	0.00140135	731	1710	1.22096
PHELPS	0.00753288	2560	6008	1.21700
CHARITON	0.00161785	742	1748	1.21239
TANEY	0.00592308	1644	3878	1.21080
BATES	0.00417981	1233	2911	1.20976
MONTGOMERY	0.00304619	927	2209	1.19857
ATCHISON	0.00078901	532	1274	1.19267
ADAIR	0.00331838	1465	3512	1.19141
SALINE	0.00594483	1745	4236	1.17657
NEWTON	0.01122998	3512	8529	1.17608
PETTIS	0.00765816	2697	6595	1.16801
JASPER	0.01966822	6831	16704	1.16800
MACON	0.00291976	1178	2898	1.16098
BUCHANAN	0.01892628	6273	15455	1.15927

1990 CENSUS POPULATION WITH INCOME <185% OF POVERTY LEVEL AND TOTAL POP. WITH KNOWN INCOME ACQUIRED FROM SPECIAL COMPUTER RUN BY THE CENSUS BUREAU USING DHHS AVERAGE ANNUAL POVERTY INCOME GUIDELINES

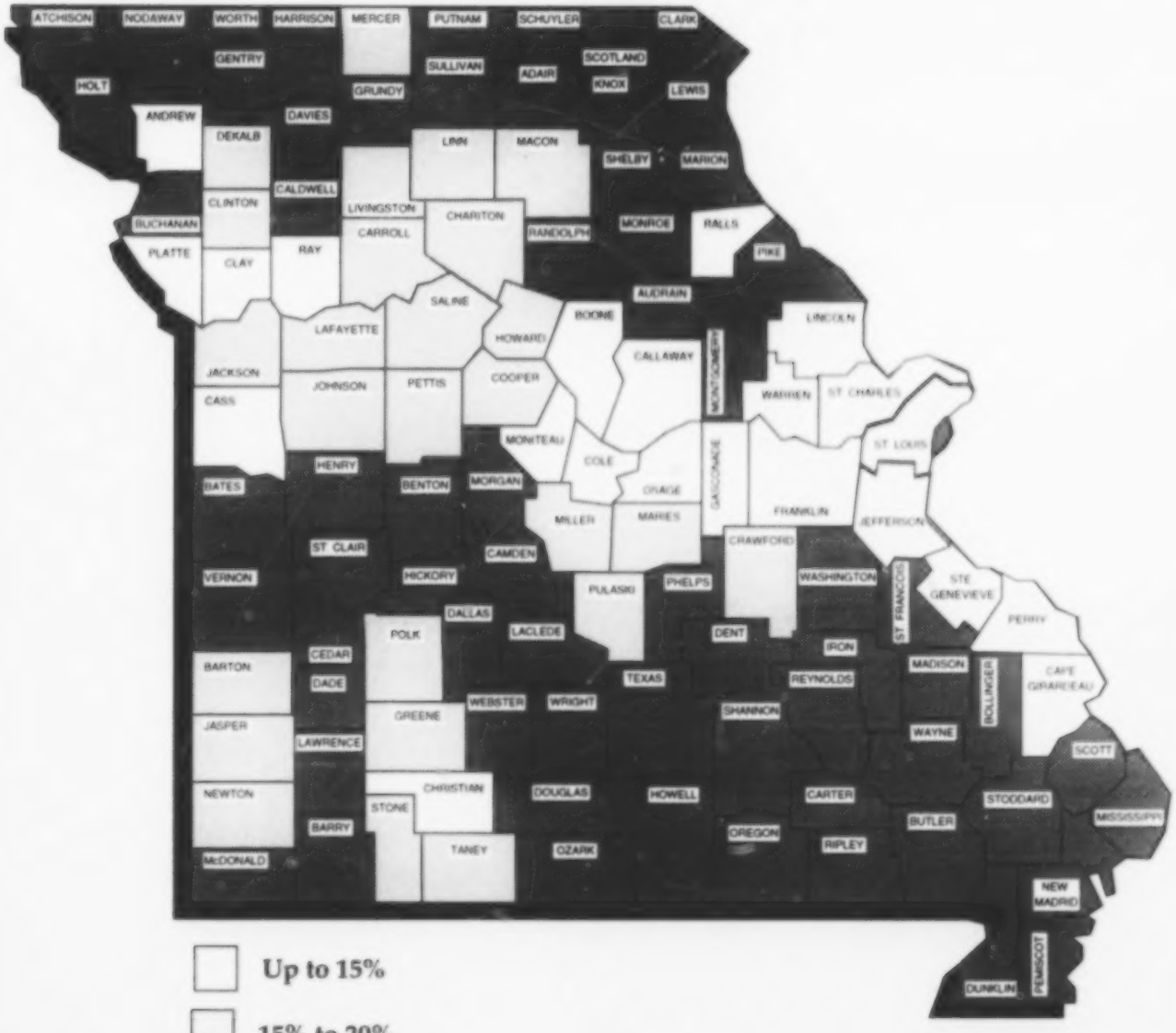
COUNTY NAME	INDEX	POPULATION <1.85x POVERTY AGES 5-17	TOTAL W/ KNOWN INCOME AGES 5-17	RISK RATIO POVERTY
RANDOLPH	0.00533385	1810	4551	1.13593
LIVINGSTON	0.00243301	1076	2736	1.12325
DE KALB	0.00133627	600	1538	1.11423
JOHNSON	0.00498356	2708	7024	1.10114
LAFAYETTE	0.00552050	2180	5925	1.05087
GASCONADE	0.00286367	903	2553	1.01022
COOPER	0.00271188	900	2589	0.99286
JACKSON	0.11089471	38161	110636	0.98515
CLINTON	0.00337256	1152	3394	0.96944
RAY	0.00498293	1559	4633	0.96109
STE GENEVIEVE	0.00244392	1096	3263	0.95934
LINCOLN	0.00601772	2030	6084	0.95299
WARREN	0.00391373	1316	3954	0.95060
ANDREW	0.00236281	984	2965	0.94787
GREENE	0.02708723	11262	34054	0.94455
PERRY	0.00212707	1131	3420	0.94453
CHRISTIAN	0.00644940	2271	6869	0.94429
CAPE GIRARDEAU	0.00665116	3358	10476	0.91551
CALLAWAY	0.00496373	1958	6150	0.90932
FRANKLIN	0.01556760	5096	16730	0.86999
BOONE	0.00957051	4902	17305	0.80906
CASS	0.00856992	3646	13173	0.79052
OSAGE	0.00141540	657	2511	0.74731
JEFFERSON	0.02413076	8666	36081	0.68599
COLE	0.00496632	2496	11489	0.62050
CLAY	0.00979833	5290	27701	0.54543
PLATTE	0.00358094	1925	10911	0.50390
ST LOUIS COUNTY	0.04424644	28680	172970	0.47357
ST CHARLES	0.01152782	6779	44486	0.43523

1990 CENSUS POPULATION WITH INCOME <185% OF POVERTY LEVEL AND TOTAL POP. WITH KNOWN INCOME ACQUIRED FROM SPECIAL COMPUTER RUN BY THE CENSUS BUREAU USING DHHS AVERAGE ANNUAL POVERTY INCOME GUIDELINES

Appendix D

MAPS
Displaying the Distribution of
Key Health Status Indicators
in all Counties in Missouri
&
CHARTS
of the Counties with the Highest Risk
Ratios for Some Indicators

Percent of Children Ages 6-17 Below 100% of Poverty, 1989



Up to 15%

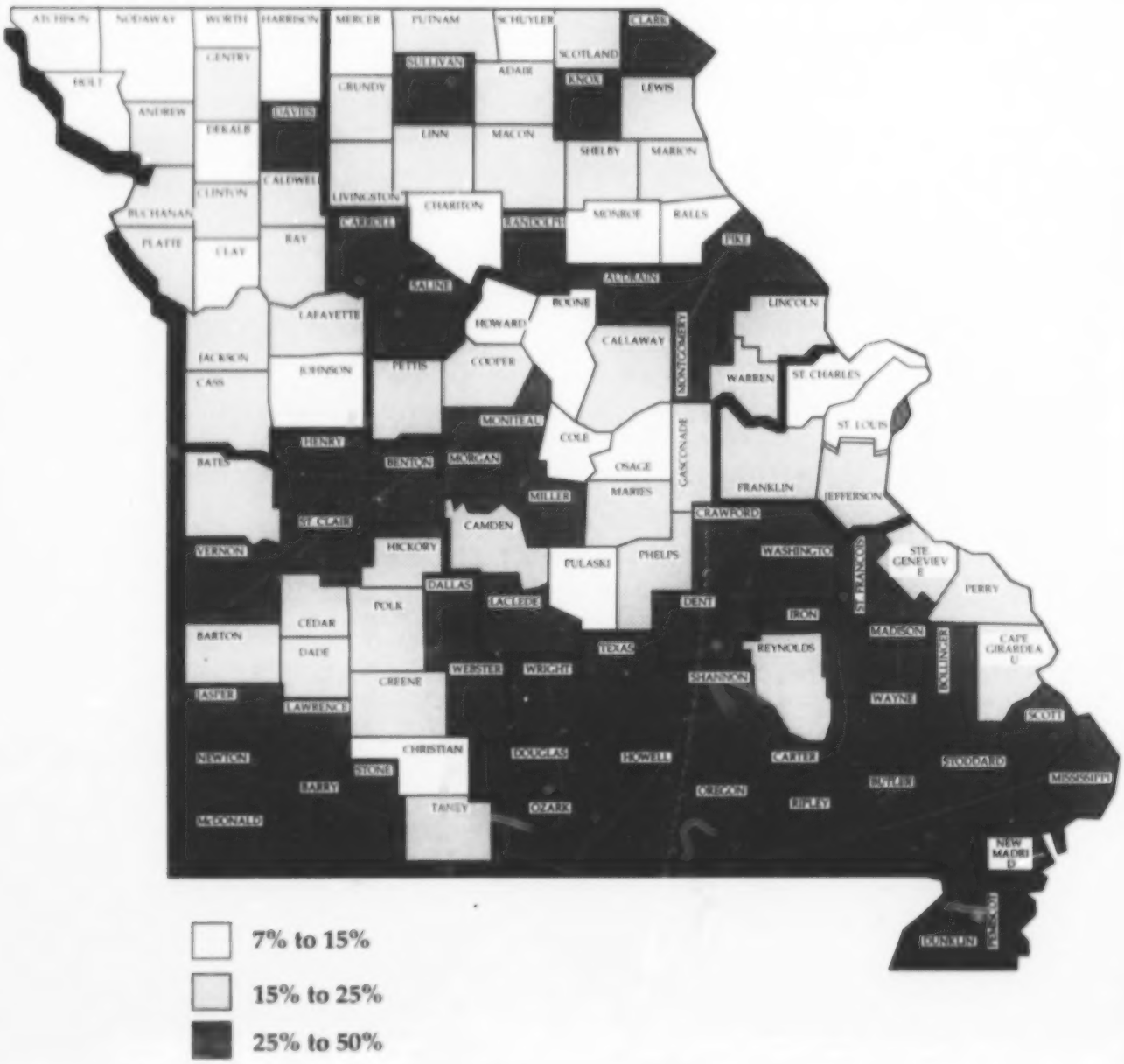
15% to 20%

20% or More

Missouri = 17.4 %

SOURCE: USDC, Bureau of the Census

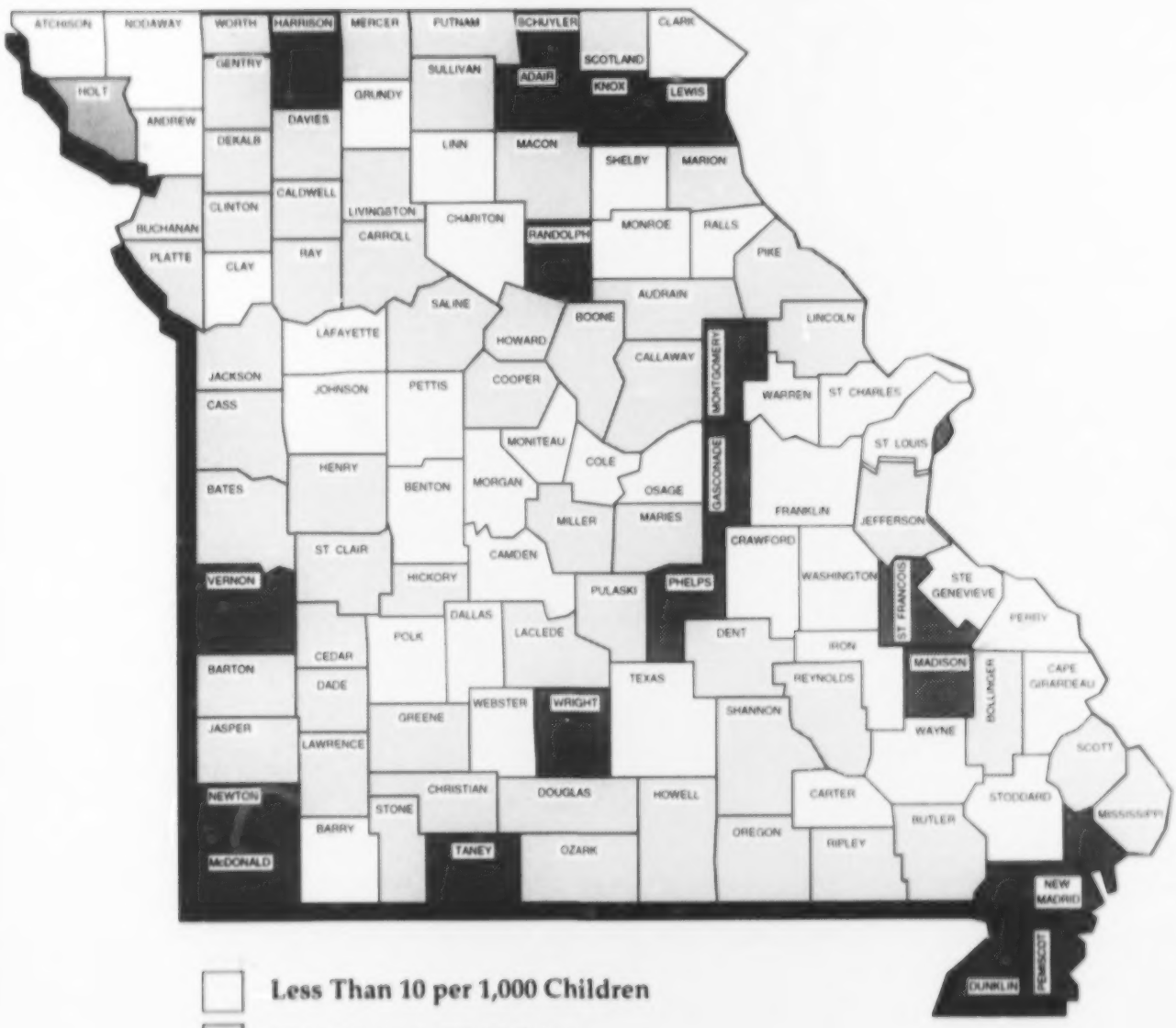
Births to Mothers With Less Than 12 Years of Education
As a Percent of All Births, 1990



- 7% to 15%
- 15% to 25%
- 25% to 50%

Source: USDA, ERS, Farmline, Vol. xii, No. 9, Sept. 1991.

"Reason to Suspect" Victims of Child Abuse FY92
Per 1,000 Children Under Age 18, 1990



- Less Than 10 per 1,000 Children
- 10 to 20 per 1,000 Children
- More Than 20 per 1,000 Children

SOURCE: Missouri Department of Social Services

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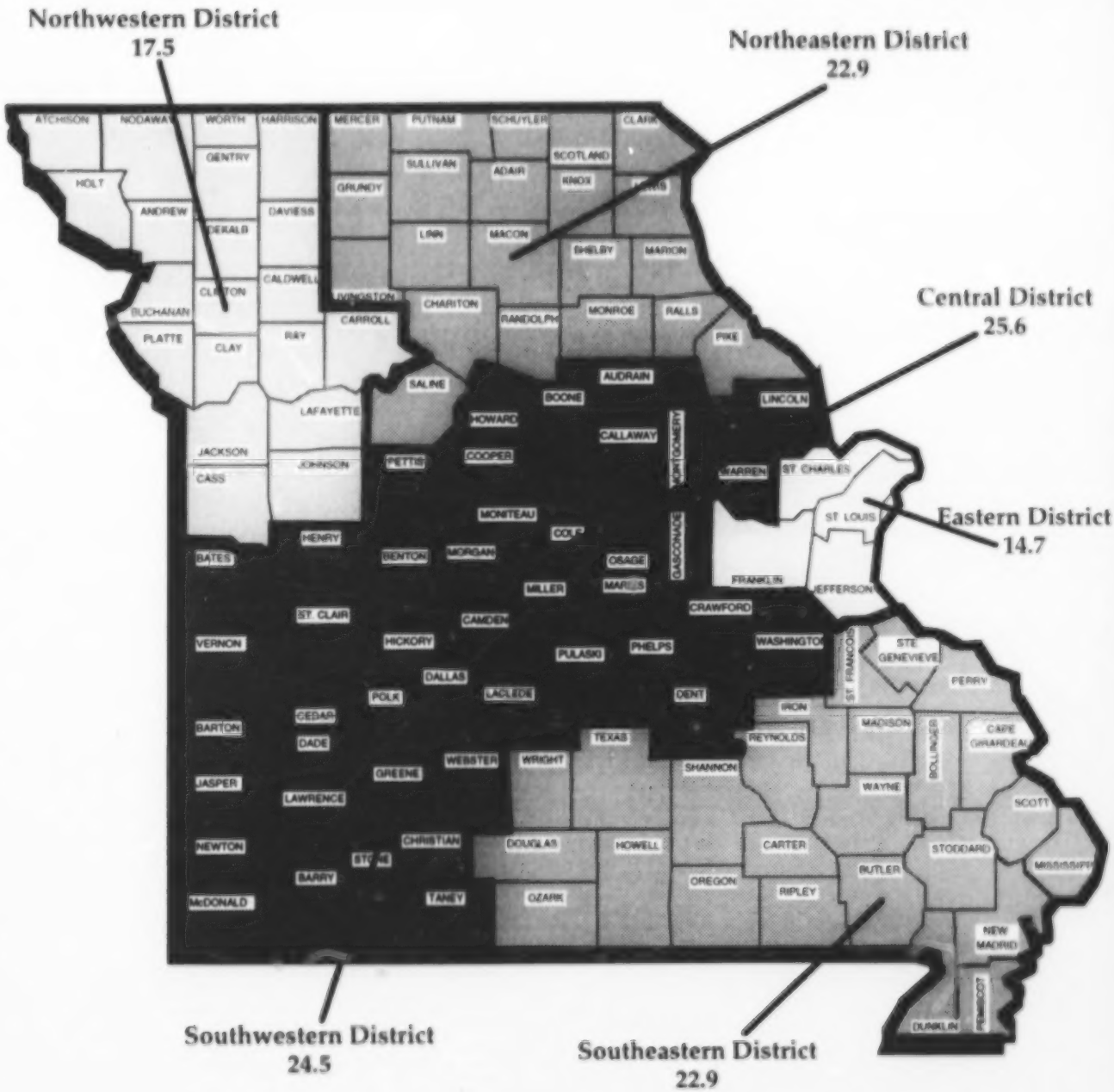
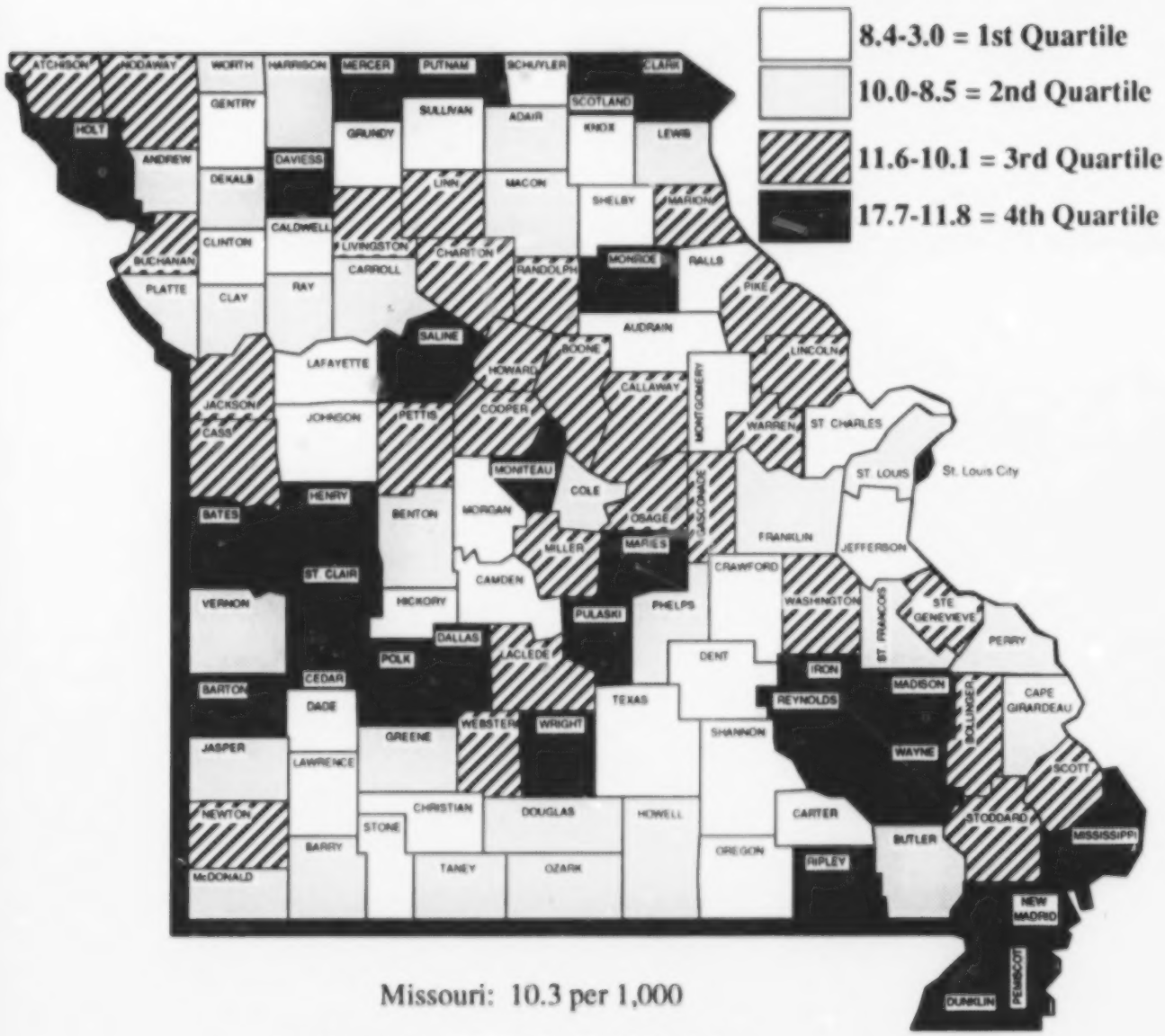
Childhood Injury Mortality Rates

State Rate 19.3



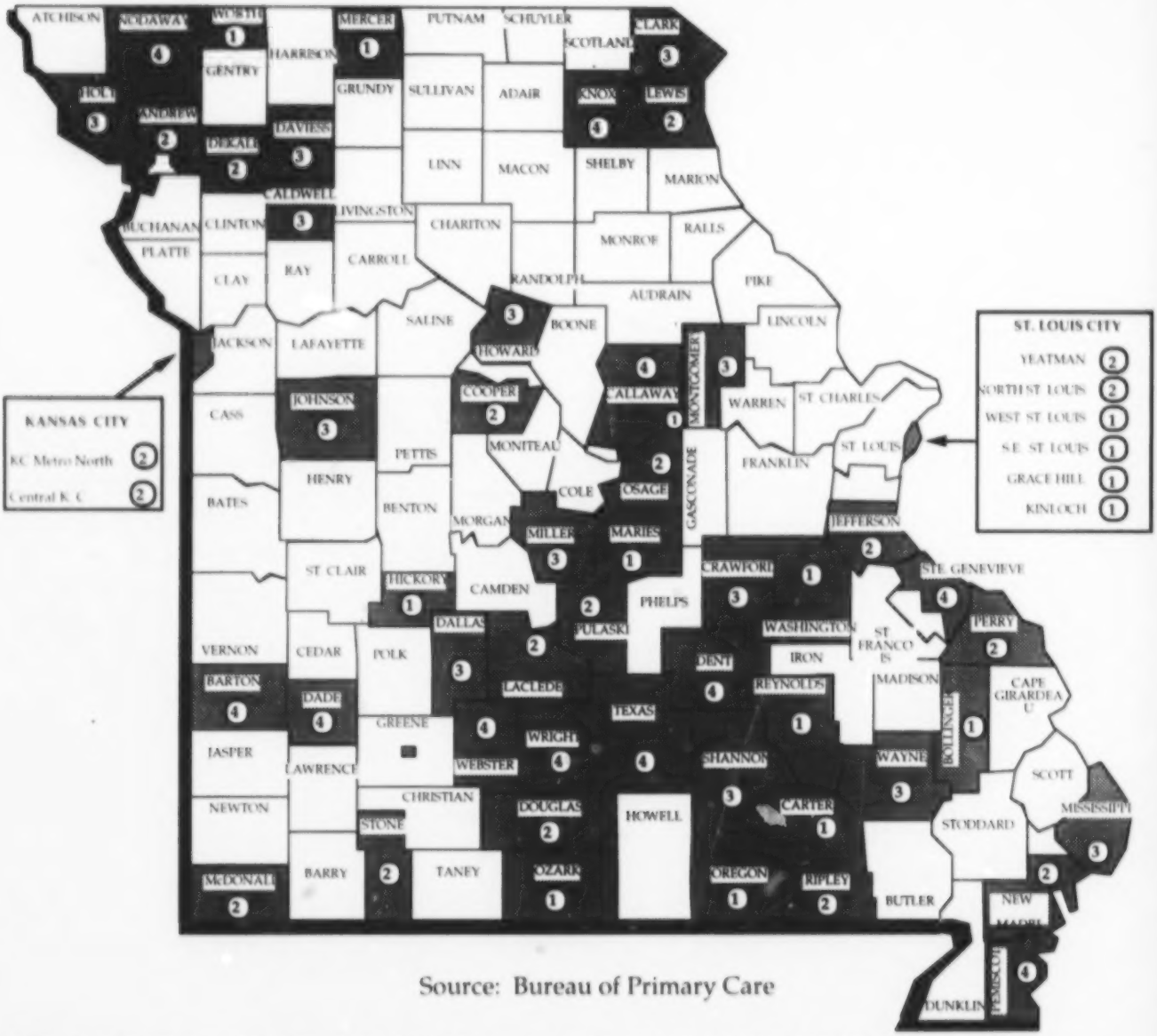
Total Infant Death Rate
Missouri Resident Data
1987-1991



Missouri: 10.3 per 1,000

Source: State Center for Health Statistics

PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS
AS LISTED IN THE OCTOBER 28, 1992 FEDERAL REGISTER



Source: Bureau of Primary Care

Health Professional Shortage Areas (HPSA's) -- area or specific population designated as HPSAs by the Public Health Service, based upon data gathered by the Bureau of Primary Care, Missouri Department of Health. The primary determination factor is the ratio of primary care physicians to population (one physician to 3,500 population). Other factors considered are the level of poverty, fertility rates and infant mortality. If any of these factors are extraordinarily high, the ratio used is one physician to 3,000 general population.

(1) Priority ranking of physicians to population ratio, as listed below, high need *(> 20% population below poverty, birthrate over 100 or infant mortality rate over 20/1000 live births)* areas ratio on the right:

Priority 1. No
Priority 2. > 5,000 to 1
Priority 3. 4,000 - 5,000 to 1
Priority 4. 3,500 - 3,999 to 1

HIGH NEED →

Priority 1. No physicians or ratio > 5000:1.
Priority 2. 4000 - 5,000 to 1
Priority 3. 3,500 - 4,000 to 1
Priority 4. 3,000 - 3,500 to 1

MDOH/BPC
01/05/93

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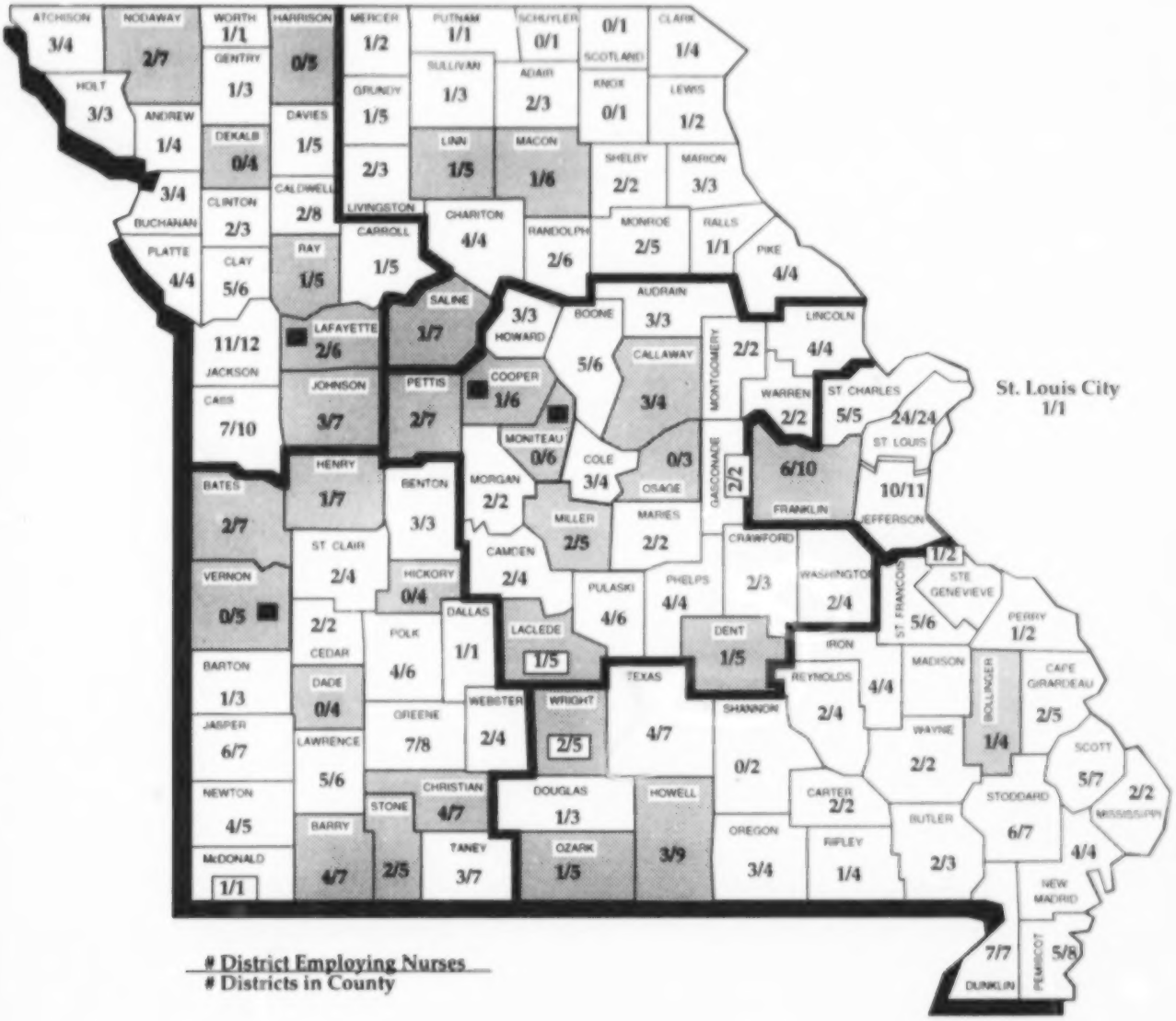
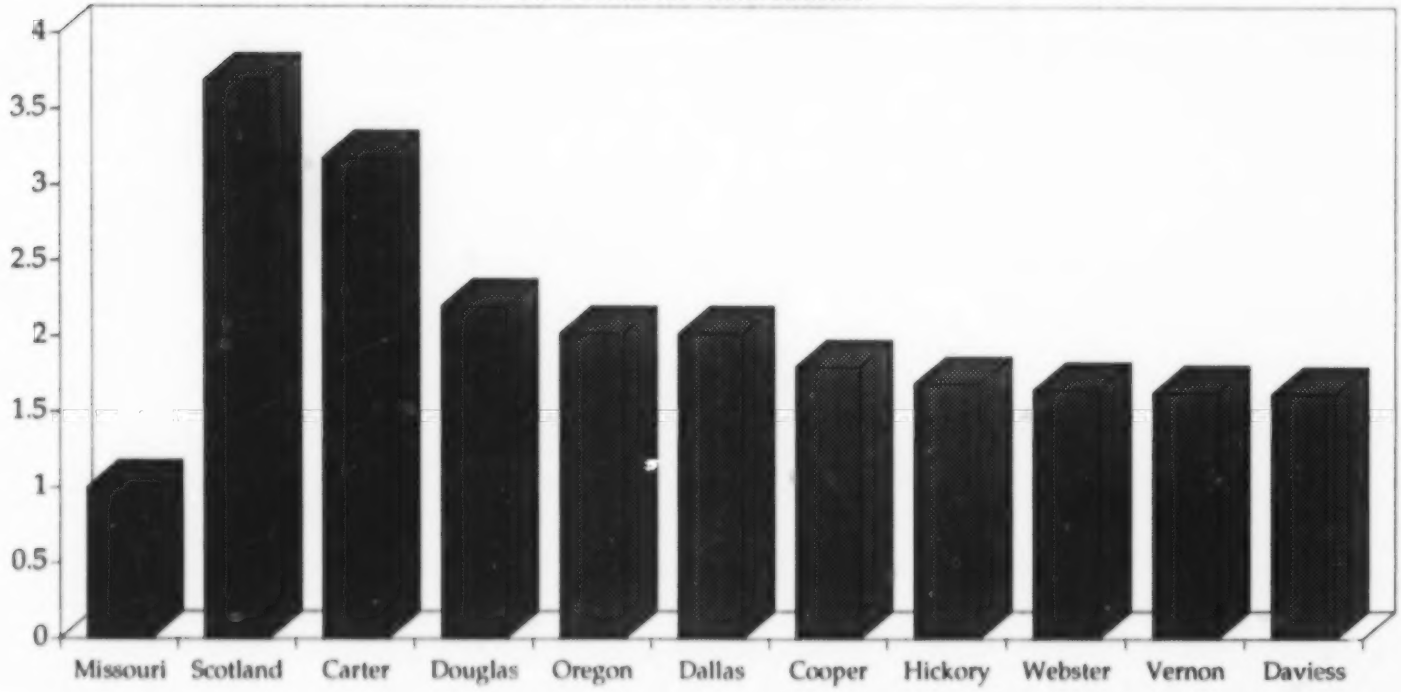
Number of Public School Districts Employing Nurses



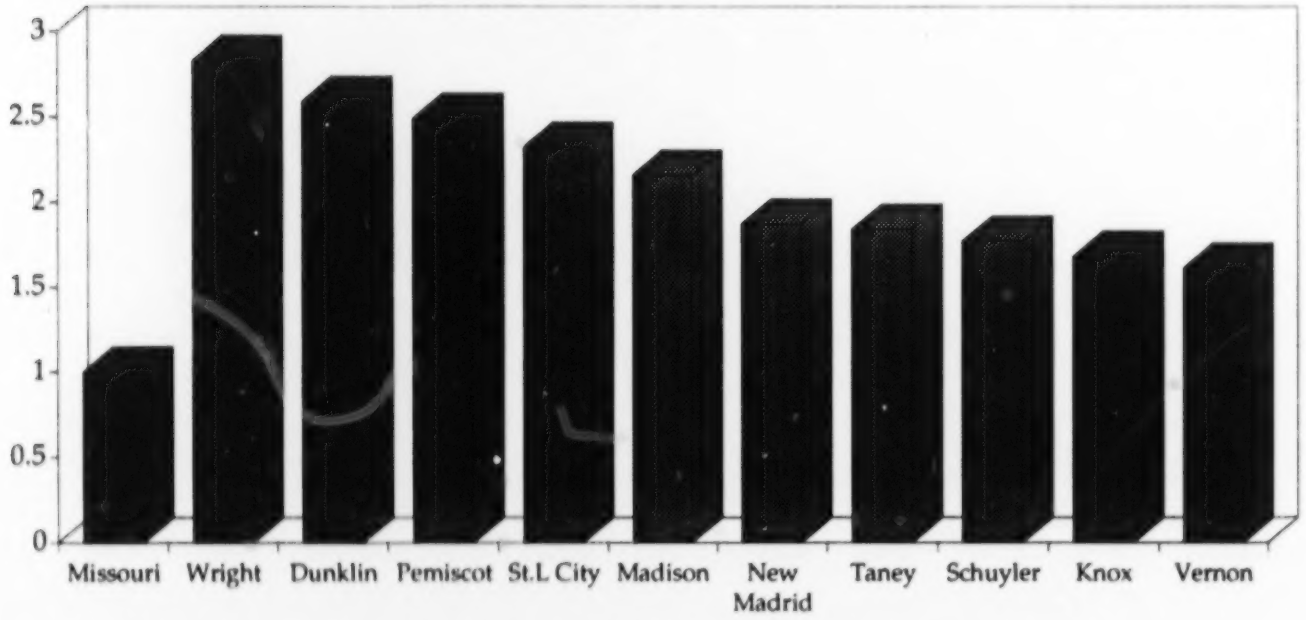
Source: Compiled from Department of Elementary and Secondary Education Reports

Ten Counties with Highest Risk Ratios for School-age Deaths, 1988-1992

Source: State Center for Health Statistics.



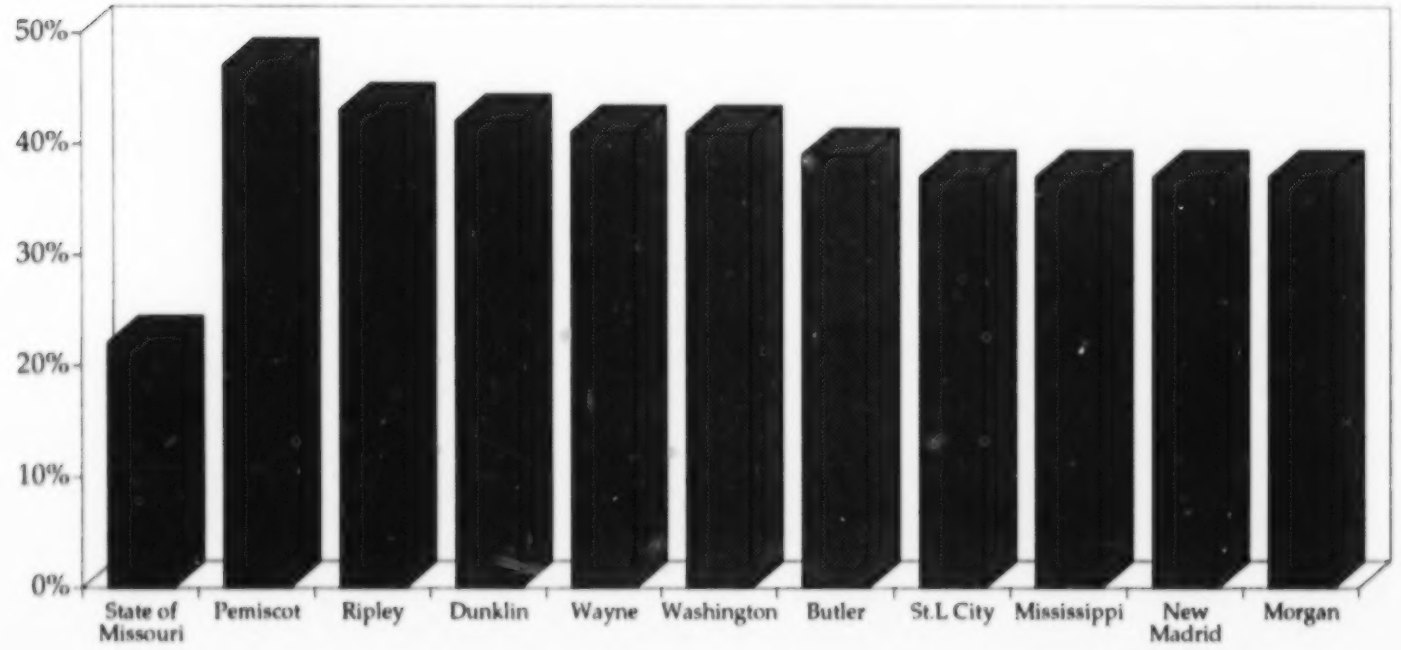
Ten Counties with Highest Risk Ratios for Reason to Suspect Abuse and Neglect, 1988-1992



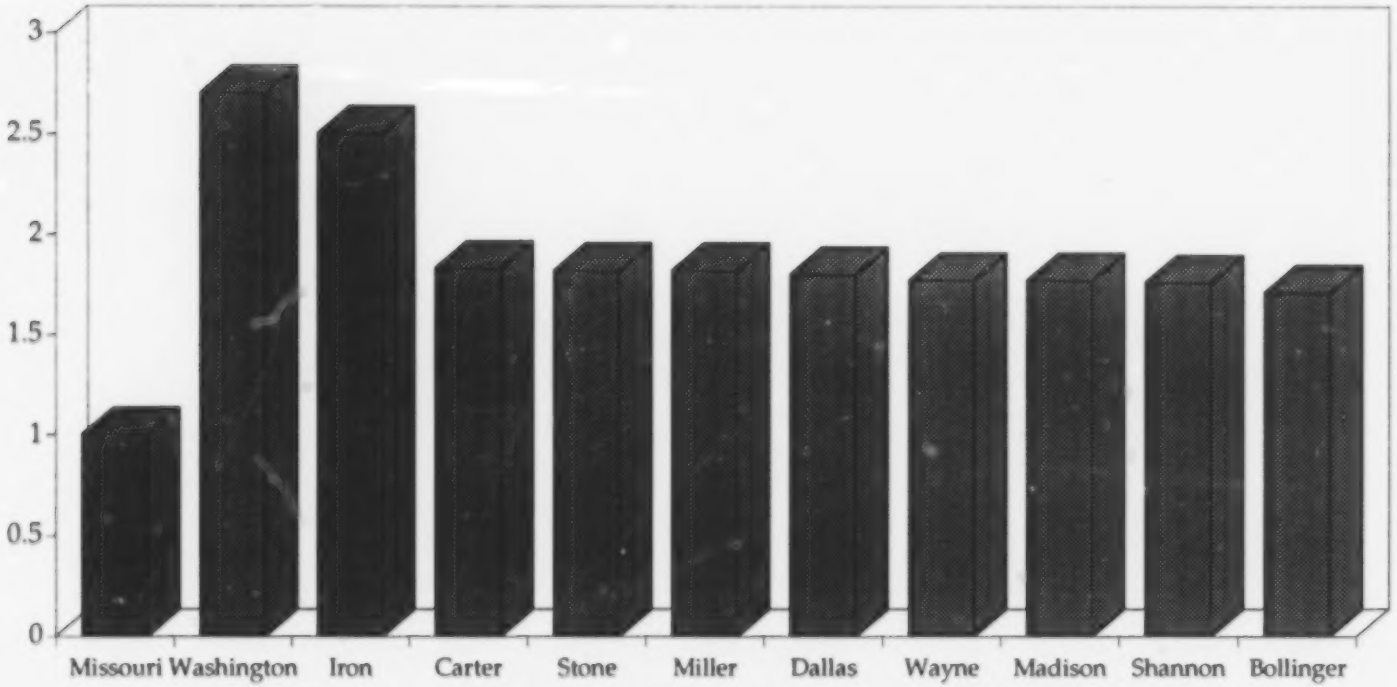
Source: Data from the Missouri Department of Social Services, analysis by State Center for Health Statistics.

Ten Counties with Highest Percentage of Births to Mothers with <12th Grade Education

Source: State Center for Health Statistics.



Ten Counties with Highest Unemployment Risk Ratios, 1988-1992



Source: Division of Employment Security, analysis by State Center for Health Statistics.

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